PERFORMANCE OF THE CCSBT 2009-2013

Independent Review

BY

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ACRONYMS AND ABBREVIATIONS

ACAP	Agreement on the Conservation of Albatrosses and Petrels
ATV	Active tuna vessels
BCWG	Bycatch WG (of Kobe II)
CCAMLR	Commission for the Conservation of Antarctic Marine Living Resources
CBD	1992 Convention on Biological Diversity
CC	Compliance Committee (of the CCSBT)
CCRF	1995 Code of Conduct for Responsible Fisheries
CCSBT	Commission for the Conservation of the Southern Bluefin Tuna
CDS	Catch Documentation Scheme
CITES	Conv. on International Trade in Endangered Species of Wild Fauna and Flora
CMS	Commission on Migratory Species
CNM	Cooperating Non Member
COFI	Committee on Fisheries (of FAO)
CPUE	Catch Per Unit Effort
EBSA	Ecologically and Biologically Significant Area (of the CBD)
EC	Extended Commission
EEZ	Exclusive Economic Zone
ERA	Ecological Risk Assessment
ERS	Ecologically Related Species
ERSWG	Ecologically Related Species Working Group (of the CCSBT)
ESC	Extended Scientific Committee
ETPS	Endangered, Threatened and Protected species
FAC	Finance and Administration Committee
FAO	Food and Agriculture Organisation
FIRMS	Fishery Resources Monitoring System
IPOAs	International Plan of Action (of FAO)
ISSF	International Seafood Sustainability Foundation
IUCN	International Union for the Conservation of Nature
IUU	Illegal, Unreported and Unregulated fishing
IATTC	Inter-American Tropical Tuna Commission
ICCAT	International Commission for the Conservation of Atlantic Tunas
IGO	Inter-Governmental Organisation
IOTC	Indian Ocean Tuna Commission
ITLOS	International Tribunal on the Law of the Sea
JTBWG	Joint Technical Bycatch WG
K2SM	Kobe II Strategy Matrix
MCS	Monitoring, Control and Surveillance
MCSWG	Monitoring, Control and Surveillance Working Group (of Kobe II)

MoU	Memorandum of Understanding
MP	Management Procedure
MSE	Management Strategy Evaluation
NCNM	Non-Cooperating Non-Member of the CCSBT
NGO	Non-Government Organisation
OM	Operating Model
OMMP	Operating Model and Management Procedure Technical Group
PRP	Performance Review Panel
PRWG	Performance Review Working Group (of the CCSBT)
QAR	Quality Assurance Review
REIO	Regional Economic Integration Organisation
RFMO	Regional Fishery Management Organization
RMA	Research Mortality Allocation
SAG	Stock Assessment Group (of the CCSBT)
SAWG	Scientific Advice Working Group (of Kobe II)
SBT	Southern Bluefin Tuna
SC	Scientific Committee
SFMWG	Strategy and fisheries management WG
SPRFMO	South Pacific Regional Fishery Management Organization
TAC	Total Allowable Catch
TIS	Trade information Scheme
TMWG	Tuna Management Working Group (of Kobe II)
UNCED	1992 United Nations Conference on Environment and Development
UNCLOS	1982 UN Conference on the Law of the Sea
UNFSA	1995 United Nations Fish Stock Agreement. The United Nations Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks.
UNGA	United Nations General Assembly
VMS	Vessel Monitoring System
WCPFC	Western Central Pacific Fishery Commission
WSSD	2002 World Summit on Sustainable Development

EXECUTIVE SUMMARY

The second Performance Review (PR) of the Commission for the Conservation of Southern Bluefin Tuna (CCSBT) was undertaken by Dr. Serge. M. Garcia, Chair of the IUCN Fisheries Expert Group, and Ms. Holly Koehler, Vice President for Policy and Outreach at the International Seafood Sustainability Foundation (ISSF). The review assessed the progress made by the CCSBT since the first assessment -in 2008- and its present performance against the best available international standards.

METHODOLOGY

The sources of information used by the Performance Review Panel (PRP) included: (i) The preceding performance reports (SA-2008 and PR-2008) annotated by the CCSBT to reflect achievements and changes since 2008; (ii) Supplemental information kindly provided, on request by the CCSBT Secretariat; (iii) Information available on the CCSBT website; (iv) Additional information and expert opinions and a few specific aspects of the assessment collected through mail from known experts listed in the Report.

The main standards against which the performance is assessed are those emanating from the Kobe I, II and III meetings, and the recommendations emanating from the first performance review process, augmented by the recommendations made by the Kobe II Working Groups on scientific advice, bycatch, tuna management and MCS. This assessment constitutes the main body of the Report. Additional assessments are made in the concluding sections using the MSC principles and criteria for ecolabelling and the Chatham House Report on the best practices for RFMOs. In the process, we observed some overlap and cross connections between some criteria and recommendations made in the past. We stressed the connections but, with a few easy exceptions, decided to largely respect the original flow of recommendations, to facilitate the examination by the CCSBT of the progress made to date.

AN EVOLVING INTERNATIONAL CONTEXT

Since its governance crisis in 1999, the CCSBT has made progress, some of which already evident in the 2008 performance assessment, improving its institutional structure and functioning, its information systems and assessment methods, its decision-process and compliance monitoring systems. It has achieved this against an evolving international context that constantly challenged the institution to adjust itself to an changing benchmark emerging from binding instruments (e.g. 1982 LOSC, 1992 CBD, and 1995 Un Fish stock Agreement,), non-binding international instruments (e.g. Kobe process outcomes, FAO Code of Conduct and UNGA resolutions), as well as modernized or modernizing mandates of other tRFMOs (e.g., IATTC and ICCAT). The CCSBT and its members contributed to the change in a process of co-evolution, particularly through the Kobe process.

EVALUATION OF PERFORMANCE

This core section of the Report is structured around the Kobe criteria which have generic value for RFMOs in general, but are specifically tailored -and represent a commendable effort of coordination from- tuna RFMOs (hereafter referred to as tRFMOs). For each criterion we review: (i) the recommendations from the first review (labelled SA-2008 and PR-2008) and the Kobe II WGs; and (ii) the level of implementation as it can be perceived through the sources indicated above. We then express our opinion about the present

status of the particular matter and make a recommendation regarding the status of the 2008 recommendations (e.g. delete, maintain, complement) and provide some new recommendations (labelled PR-2014), as appropriate.

Conservation and management

Status of living resources

This is the main concern and mandate of the CCSBT and its main problem as the stock has been excessively depressed and will take some time to recover. The recommendations we examine deal with: (i) the reconstruction of the historical SBT catch and CPUE data; the robustness of the stock assessment procedures, the precautionary approach to the target species management, the SBT stock rebuilding strategy, the support research programme, the risk assessment of ERS and the decision-making process.

Regarding the data, and considering the difficulties and uncertainties in recreating past data, we recognize the validity of the CCSBT choice, suggest to continue focusing on the quality of present and future data and to ensure continuous Scientific Data Verification.

The present stock assessment approaches (and the operating model) are sophisticated, use fishery dependent and independent data and lead to build in robustness against past and present uncertainties in the data and processes. It is only suggested to use retrospective analysis from time to time to check the performance of the process.

The precautionary approach is recommended by UNCED and enshrined by the UNFSA. Even if the CCSBT has not yet updated its Convention, it has implemented it in the development of the Management procedure and metarule. The recommendation is therefore considered as fulfilled. It is also recommended to look at the robustness of the MP to climate change and to give more priority to stock rebuilding whenever possible.

The stock rebuilding and the strategy needed to achieve it are fundamental instruments for the CCSBT. Strategies have been adopted, expressed in the Management Procedure and the interim and final rebuilding objectives. The ultimate rebuilding objective, in line with the LOSC and the UNFSA is the level corresponding to the Maximum Sustainable Yield (MSY) but, as suggested n the Strategic Plan, it may revisited in the long term, considering the possibility to adopt instead the Maximum Economic Yield (MEY). The recommendation is considered as fulfilled and it is recommended to identify additional measures to accelerate rebuilding. Later in the report, it is also suggested to proceed to an economic analysis of the alternative rebuilding strategies which are likely to have different medium- and long-term economic implications.

The Management strategy and its metarule process (to detect and respond to exceptional circumstances) are the central devices of the precautionary stock-rebuilding strategy adopted by CCSBT. Combined with the analysis of fishery indicators and the triennial in-depth stock-assessment they represent a most advance instrument available in support of decision-making. The related recommendation is considered fully implemented and representing best practices.

Regarding the research programme (presently largely developed by the Members), sustained efforts are recommended and it is suggested to develop a focus, in collaboration with other tRFMOs, to foresee the changes (including of resilience) provoked by climate change,

The ERS are the other point of tension in the CCSBT (as in most RFMOs since the emergence of the requirement for a more ecosystemic approach to fisheries in the early 2000s. The CCSBT has made some limited progress on seabirds and sharks (in longline fisheries) but it relies heavily on scientific work done by others, binding decisions made by sister RFMOs. Some dissatisfaction has been expressed in NGOs about the amount of effort deployed, recognizing, however, that the situation has improved in the last years. More specific work and decisions on ERS are needed to improve monitoring, measures, compliance and performance assessment on ERS, around a more explicit, transparent and foreseeing strategy.

Data collection and sharing strategy

Considering that the 1999 crisis of the CCSBT resulted to a large extent from the use of inaccurate data, this section is fundamental. The original recommendations concern: (i) the development of a strategy to collect data and share it between Members and tRFMOs; (ii) to agree on common data specifications; (iii) to ensure compliance; (iv) to deal with confidentiality in a way that allows efficient and accurate assessments. These recommendations have been further specified by the Kobe II WG.

We recognize that the challenge has been actively faced and that while the SA-2008 recommendation can be considered as largely fulfilled, it needs to be replaced, however, by a number of more specific ones regarding the multidimensional aspects of the question. A number of these are already available regarding for example the catch of juvenile SBT and recreational and artisanal fisheries require also attention.

Data standards have been established e.g. for scientific data reporting, observers' data and ERS data. The Catch documentation Scheme (CDS), the lists of farms, authorized vessels and presumed IUU vessels are major advances. The observer data has been better specified but the ERS data requirements need more priority. Other data issues are scattered across the document as components of other areas.

Significant efforts have been made to improve/ensure compliance including data verification procedures and, more recently, Quality Assurance Reviews. The adoption of a Compliance Plan and recent recruitment of a Compliance Manager will further improve the CCSBT response. The original (SA-2008-5) recommendation can be considered fulfilled but more specific could be developed to improve the situation in areas of concern

Data confidentiality is one of these areas and it remains a thorny issue. Confidentiality has been better codified and protected through the Rules and Procedures for the Protection, Access to, and Dissemination of Data but the release of operational data for better stock assessment remains a problem to be effectively faced. A time limit might be set for each data type beyond which the data would become automatically part of the public domain.

Quality of scientific advice

Decision-making in RFMOs depends heavily on the quality (albeit not exclusively) on the scientific advice (its relevance, accuracy, robustness, etc.). The main issues concerned: (i) the balance in the efforts put respectively on assessing SBT and ERS; (iii) the overall scientific oversight and independence of the ESC; (iii) the scientific skills required in the Members and in the CCSBT scientific mechanisms; (iv) the need to develop a Management Procedure and to develop inter-RFMOs work on Management Strategy Evaluation (MSE);(v) the large scale tagging programme;(vi) the development of a more

spatialized approach to assessments and modelling; (vi) the development of minimal standards for stock assessment; and (vii) the development of research capacity of developing members.

As mentioned above, substantial progress has been made in that area. The management procedure is now operational (since 2011) and the process to assess its robustness (every 6 years) is in place. The tRFMO cooperative work on MSE is progressing rather slowly at the moment even if the CCSBT work on that area is significant and operational. This is even an area in which the CCSBT can provide some leadership. Many of the Kobe II scientific Advice WG recommendations are fulfilled on being fulfilled.

Areas in which more progress need to be made include the collaborative development. With the other tRFMOs of an ecosystem-wide framework and of high resolution spatial ecosystem models specially parameterized for tuna fisheries. This would allow the use of more spatially-based, more precise, management measures and help improving the tRFMO's foresight on climate change.

A really critical area (and new recommendation) relates to the need to develop a more comprehensive, specified and transparent bycatch policy and management strategy.

Adoption of conservation and management measures

The related "omnibus" Kobe criteria touches on many of the numerous domains in which CCSBT may need to make decisions. In a nutshell, they call for science-based measures on SBT and ERS, accounting for the precautionary approach and framed within an ecosystem approach to minimize harmful impact on ERS (particularly seabirds, sharks and turtles) and biodiversity in general and also to reduce pollution, waste discards, and ghost fishing.

The recommendations stressed a number of needs: (i) to ground management measures on quality science; (ii) to meet UNFSA standards; (iii) to modernize the Convention; (iv) to develop a SBT strategic and management plan; (v) to rationalize the determination of national allocations; (vi) to improve the management and conservation of ERS; (vii) to institutionalize the application of the precautionary and Ecosystem Approaches; and (viii) to adopt rebuilding plans. Some of these concerns have been echoed in other sections of the report.

The advice presently delivered to CCSBT by its scientific subsidiary bodies is excellent. The institutional set-up, with its independent panels and chairs, the systematic peer review processes, the adoption of instruments like the MP, the metarule, triennial in-depth assessments, indicators, etc. provide instruments which are at the top of the international standards. The advice delivered by the ESC has apparently always been followed-up.

The requirement to meet UNFSA standards is an important one. The CCSBT is presently trying to meet these standards through its programme without revising its Convention. The pros and cons for such revision are briefly touched on in the report. At the moment, most of these standards, as reflected in the Kobe criteria or the Chatham House best practices, are being met (or are being explicitly aimed at) but we are concerned that, in case of very difficult decision (e.g. if the stock would accidentally crash) the non-alignment to the UNFSA standards for decision-making for example, could be very detrimental.

The need for Strategic Plan is satisfied. It has been adopted by CCSBT in 2011 and its goals and strategies are aligned with practically all the Kobe criteria, except a few directly

related to some of the UNFSA requirements. The recommendation is therefore fulfilled. More specific ones might be needed in the future.

The CCSBT does not have yet a Management Plan but its decisions, objectives protocols, procedures (including the Management Procedure) cover a very large part of what would be needed to publish a bone fide Management Plan. The gaps include the effective application of the Ecosystem Approach and a transparent system of penalties for non-compliance. Such a Plan could be annexed to the Strategic Plan.

Regarding national allocations, the present practice of proportional allocation of the TAC based partly on historical catches and partly on negotiations is not completely transparent and some of the initial allocations to new entrants are being questioned by them.

The question of conservation and management of ERS was given little attention in 2008 and has taken a much higher profile in the international arena. More is expected from the CCSBT in terms of data collection, assessments, management decisions, implementation, and performance assessment. The decisions to start a proper assessment on Porbeagle sharks and to establish a WG on Effectiveness of Seabird Mitigation Measures in longline fisheries is a move in the right direction. More need to be done about ERS data in observers' programmes, the promotion of the FAO IPOAs for sea-birds and sharks.

One aspect tends to pop-up repeatedly: the need for CCSBT to adopt its own binding ERS-related measures in addition to those already adopted by other RFMOs and in theory complied by SBT vessels when operating in their waters. Related to that recommendation, there is the need to evaluate the effectiveness of the present ERS strategy of the CCSBT (but see the preceding paragraph). The ERS Working Group has an important role to play in this respect, to rebalance the CCSBT programme and Strategic Plan.

The application of the Precautionary Approach is also mentioned as important in this area of work of the CCSBT and has been already discussed in relation to the Management Procedure, the structure and utilization of which is precautionary (based on a thorough risk assessment).

The ecosystem Approach (EA) is not formally implemented even through many of its elements are present in today's CCSBT strategy. Gaps could be identified and would probably relate to habitats (not very relevant for SBT) and ERS, and perhaps some reflections about the CBD requirement for the EA, to use the ecosystem *without modifying its structure and function.*

Management of fishing capacity

Excess capacity is one of the main factors responsible for of overfishing and IUU. The issue is particularly arduous to resolve, and even to assess as the tuna fleet belongs to many States, is highly mobile (changing targets and areas), and has a very elastic fishing capacity that can be increased substantially through changes in fishing practices, distribution of effort, and technology. In these conditions determining the ideal fishing capacity is not easy for any tRFMO. CCSBT has chosen to control catches through TACs and national quotas allocation instead leaving at national level the assessment and eventual correction of fishing capacity.

CCSBT should improve and formalize its assessment of the capacity being authorized, be particularly aware that capacity will tend to grow as stock will rebuild (even without changing the fleet size). When calculating its long term rebuilding target (MSY or MEY) It

should also project the capacity needed to catch it. Finally, some consideration of the possibility to develop an agreement within tRFMOs to limit the overall capacity might be useful.

Compatibility of management measures

This question is central to the UNFSA spirit and operations. Management measures should be compatible with each other across the entire area of distribution of the stock. All the measures taken by CCSBT apply equally across the entire area of distribution of the stock. A compatibility issue, if any, would arise from compatibility of fishing patterns, e.g. when national quotas are transformed into catches of juveniles in Australia and catches of spawners in Indonesia. In theory, though, this is taken care of in the Operating Model and the overall assessment. The "compatibility" of the measures would become more explicit if the management system used more spatially differentiated measures. The compatibility issue, in its original orientation does not arise.

Fishing allocations and opportunities

Two issues are raised under this item: (i) the effect of pressures exerted by members to increase their allocation as much as possible on the TAC decision; (ii) the impact of the allocation given to new entrants on the TAC. CCSBT has disconnected the national allocations from the TAC determination by having a fixed proportional system of national allocations. This does not limit Members' pressure to increase the TAC directly but the Management Procedure is a transparent safeguard against this threat. Finally, the allocations to new entrants have been taken from the TAC and not in addition to the TAC. The original recommendation can be considered as fully implemented.

Compliance and enforcement

The CCSBT has made commendable strides in modernizing and strengthening its processes to assess and address the implementation of, and compliance with, CCSBT resolutions and decisions by its members and CNMs. In particular, the CCSBT has adopted a revised structure and functions for its Compliance Committee and a set of associated tools that are, at present, largely unique among the other tRFMOs. However, as these processes, policies, action plans and tools are still fairly new (i.e., adopted within the last 2-3 years), it is not possible to gauge their ultimate effectiveness. One issue that will need to be borne in mind by the Commission is how consensus decision-making could become an obstacle to the full and effective functioning of these compliance and corrective actions policies.

Three areas where the CCSBT has room to improve with regard to its overall compliance and enforcement framework are: (1) its observer program; (2) VMS; and (3) high seas boarding and inspection procedures. The Report outlines our recommendations for each in detail. With regard to observers, the current program needs improvement to achieve the stated coverage rates, as well as to be broadened into a more modernized regional observer program. With respect to VMS, reliance on the adopted programs of neighboring tRFMOs is not sufficient. At a minimum VMS reports collected under the WCPFC, ICCAT and IOTC systems should come to the CCSBT Secretariat and be used in the Science and Compliance Committees. Further, the CCSBT should develop baseline standards that apply to SBT vessels regardless of their area of operation that are based on best practices for VMS. Finally, high seas boarding and inspection procedures should be developed to

facilitate compliance and enforcement at sea, using existing models and the provisions of Article 21 and 22 of the UNFSA.

Decision-making, transparency and dispute settlement

In the area of transparency – both in the ability of civil society groups and inter-governmental organizations to participate as observers in meetings of the CCSBT and the availability and accessibility of information to the public – the CCSBT has made significant strides since the last performance review. With respect to decision-making and dispute resolution, risks remain for the future effectiveness of the organization as these procedures could result in a reprise of deadlocks or stalemates that could compromise the conservation and management of the SBT resource in case of unexpected evolutions. In both cases, changes to the CCSBT Convention are likely necessary to address the potential risks. This Report encourages the CCSBT to seriously consider alternative models and approaches for both decision-making and dispute resolution, which may require amendments to the Convention.

International cooperation

In the area of cooperation with non-members, the CCSBT is performing well and has taken a number of steps to engage and effectively collaborate with cooperating non-members (CNMs), as well as non-cooperating non-members (NCNMs). Given the importance of engagement with all actors in the SBT fishery and supply/market chains to the effective implementation of CCSBT measures, the CCSBT is encouraged to continue and enhance its ongoing efforts in this arena.

With respect to cooperation with other RFMOs and assistance to developing States, this Report recommendation further efforts. In particular, many of the recommendations of the Kobe process and working groups for joint work among tRFMOs to harmonize efforts to combat IUU, share scientific data, and address bycatch have not been progressed. The CCSBT is encouraged to engage its sister organizations to re-invigorate these much needed initiatives. Lastly, with regard to assistance to developing States, while the CCSBT has make some progress in this area, it is the view of this Report that the CCSBT needs to develop and implement a more comprehensive strategy for addressing the capacity building needs of its developing State members and CNMs to ensure the full and effective implementation of its measures and technical programs.

Financial and administrative issues

The issues raised by the initial SA-2008 and other recommendations included: (i) the CCSBT capacity to provide policy and management advice; (ii) the financial resources available to support CCSBT's work; (iii) the Secretariat efficiency and effectiveness. In response, the CCSBT has: (i) recruited a Compliance Manager in 2012; and (ii) managed to execute its plans leaving a budget surplus at the end of the year, indicating that it received sufficient resources.

Measuring objectively effectiveness of the Secretariat is a complex exercise. The Secretariat executes tasks that go beyond the purely administrative mandate given by the Convention and provides substantial policy and management advice, programme coordination and oversight. The detailed objectives of the Secretariat work and the standards expected from it do not seem to be explicit anywhere. The achievements of the CCSBT between 2008 and 2014 (see below) would indicate that the Secretariat has indeed

been “effective” even beyond its TORs but an objective, substantiated assessment would be possible only against more explicit targets and agreed indicators (e.g. degree of implementation of recommendations). The Strategic Planning process would be a golden opportunity to elaborate an assessment grid for the Secretariat.

The economic efficiency is also hard to assess in the absence of international standards and comparisons with other tRFMOs is of limited value. If the execution of the budget is a guide, the Secretariat has been effective at executing the programme while making savings. Whether the carry-over procedure is considered efficient or not is a matter for the CCSBT and its auditing process to decide.

Overall CCSBT performance review process

This Report proposes a reflection on the Performance Review process, based on the experience of the last (and first) two reviews examined against the criteria contained in the FAO guidelines on performance reviews (establishment of review panels; funding; role of the Secretariat; Role of Members and other stakeholders; methodology; timeframe; Transparency; and responsiveness). The evidence available indicates that the CCSBT process has satisfactorily fulfilled the criteria contained in these guidelines (except perhaps the involvement of other stakeholders). It is suggested that the CCSBT could establish a repository of recommendation (from the performance review process as well as from CCSBT proceedings) and of the response and possibly outcomes, as a strategic implementation dashboard and an institutional memory, to assist in decision-making and performance assessment in the future. .

CONCLUSIONS: CCSBT PERFORMANCE AND INTERNATIONAL STANDARDS

The sources of performance standards used for the assessment are: the Kobe criteria, the MSC Principles and the Chatham House best practices for RFMOs.

The assessment against the Kobe criteria provides a dynamic view (1994-2014) of the progress achieved by CCSBT to progressively meet changing standards, using the most modern standards as benchmark. The semi-quantitative representation used, combined with “traffic light” coding for each criteria illustrates the continuous progress since 1994 in relation to each criteria (**Figure 1**) and overall (**Figure 2**). Figure 1 shows the progressive improvement of CCSBT emerging progressively as a modern RFMO even if some more efforts are needed. Figure 2 represents that trajectory on average. The evolution has accelerated with time (except in the last 2-3 years) and may reflect two accelerations in 1999, in the wake of the dispute about the state of the SBT stock, and in 2009, in the process of implementing the recommendations of the 2008 performance review and the Kobe I, II, and III meetings. The last points may reflect an “institutional fatigue” in an institution that must now fully master the innovations it has introduced. It may also reflect the fact that as the top level is approached, the marginal costs of progress are getting significantly higher.

It is important to stress that this “performance measures the adaptation of CCSBT to shifting standards but not the outcome of that progress in terms of stocks (where the progress, if any, is weak) and ecosystem impact (for which both historical data and modern assessments are lacking).

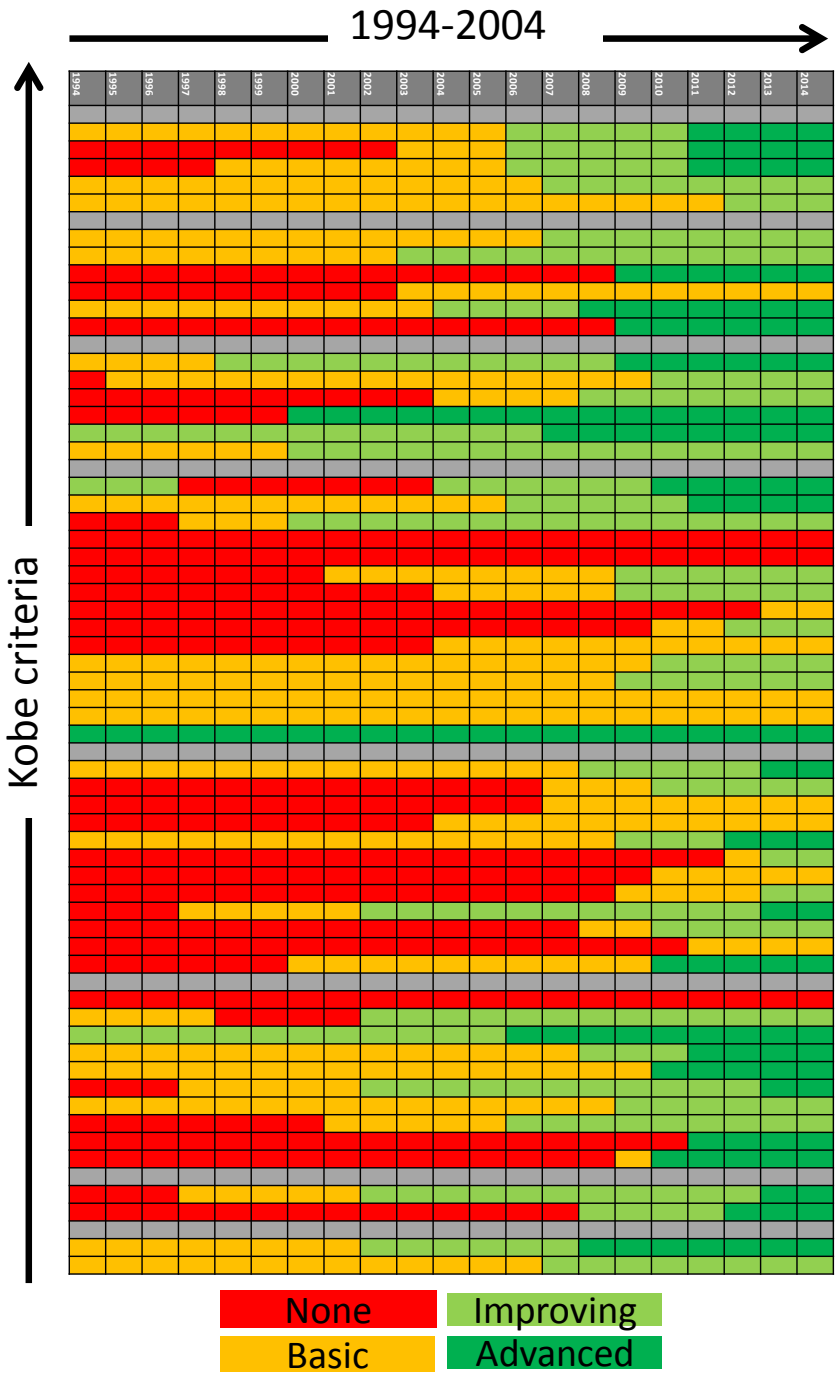


Figure 1: Retrospective representation the evolution of CCSBT management system against the modern Kobe criteria, from no implementation to an advanced one (see a more detailed figure in the Report)

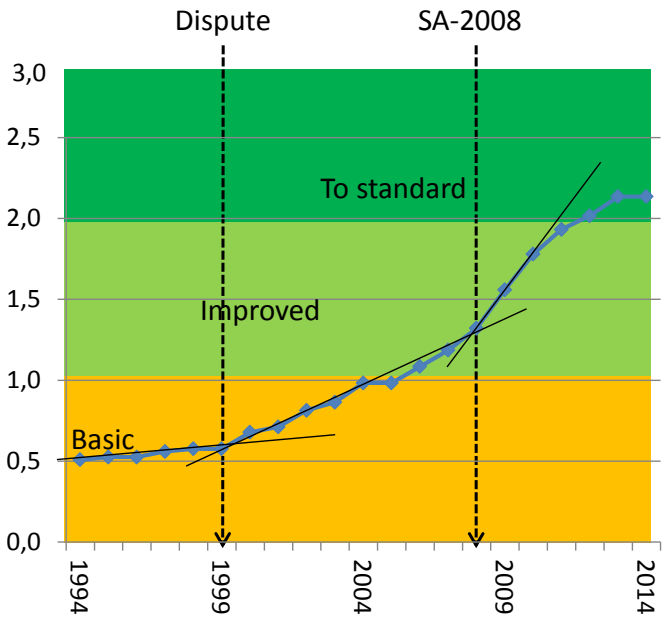


Figure 2: Evolution of the mean performance of CCSBT in reference to modern tuna RFMOs governance standards (1994-2014). Trend lines fitted by eye.

The comparison of the performance of CCSBT against the Kobe Principles in with the requirements under the 3 MSC principles simple assessment of CCSBT performance against the MSC Principles indicates -without surprise- that the performance is

- Bad against Principle 1 as its target stock –already depleted in 1994- remains depleted and the recovery strategy has not yet changed the situation;
- Insufficient in relation to Principle 2 as the efforts towards managing ERS are still very limited, despite ongoing cooperation with other relevant international institutions;
- Good in relation to Principle 3 as its management system (data collection and exchange, science, elaboration of advice, decision-making, compliance and evaluation of performance) on which significant improvements have been made, particularly in the last 5-6 years.

The qualitative assessment of CCSBT performance against the Chatham House best Practices is summarized in **Table 1.**

The overall score obtained is about 76% and is probably in the top range of the tRFMOs for organizational performance even though we are not aware of the existence of equivalent analyses. The results (which reflect presence/absence of dispositions in the Convention, rules of procedure, and mechanisms) are to be taken with a grain of salt, however and the report discusses some of the “anomalies” in this table.

Table 1: Semi-quantitative assessment of the CCSBT performance in relation to the Chatham House best practices for RFMOs (Using categories and criteria listed in Lodge et al., 2007)

CRITERA	Number	Score	%
General practice	10	8.5	85.0
Conservation/management	33	23.5	71.2
Allocation	8	6.5	71.2
Compliance / Enforcement	12	8.5	70.8
Decision-making/General	7	7.0	100.0
Decision-making/budget& Admin.	3	0.5	16.7
Decision-making /Substantial issues	7	3.0	42.9
Decision-Making/Total	18	10.5	58.3
Dispute settlement	12	11.,0	91.7
Transparency	8	7.0	87.5
Dev. Countries requirements	7	2.5	35.7
Institutional practice	13	13.0	100.0
TOTAL	120	91.0	75.8

DISCUSSION

It is clear that the situation that prevailed in many aspects of the CCSBT functioning before 1999 is being corrected and that the CCSBT score has increased as more and more demanding standards were adopted. However, the performance of the CCSBT has been measured on two grounds: (1) The management system and (2) The state of its resources and ecosystem.

As in most RFMOs, the state of the industry and of the communities, the fleets' viability and the people's livelihoods bear little explicit weight in the open debates and in the performance assessment of performance in any RFMO (even though economic considerations do appear in the Chatham House criteria). Nonetheless, the CCSBT Strategic Plan (**Section 6.3**) refers to Maximum Economic Yield (MEY), maximization of profits, differentiated Members' strategies to achieve the goals, and distribution of stock-rebuilding benefits. This provides an original framework for the future developments in relation to which the CCSBT will need to innovate and deliver. This Report provides also some discussion regarding the different economic impacts of different rebuilding trajectories suggesting their closer analysis.

With all the progress made, particularly since 2010, the management system appears clearly advanced. A few more processes and instruments might be needed to develop better foresight about climate change-related risks (for the stock and the industry) and to economically optimize the rebuilding trajectory.

The state of the resources is very poor and a source of concern in case of very bad climatic conditions. The situation is a heavy legacy of the past mismanagement before the CCSBT creation and it first years of existence. As time passes by, however, the part of responsibility that CCSBT has is increasing. Rebuilding rests on the quality of the Management Procedure and of its implementation… and on the hope of good climatic

conditions in the future. CCSBT would be well advised to use any opportunity to accelerate stock rebuilding and to see this as an investment and not as a cost.

The issue of overcapacity will continue to create problems which may increase as rebuilding will progress and in case of strong and unexpected unfavorable climatic events. The issue is complex but any complacency in its regards could be very costly in the future.

The 1992 CBD and the 1995 UNFSA, as well as the Kobe criteria imply a broadening of the RFMOs agenda to better consider the Ecologically-Related Species (ERS), Endangered, Threatened and Protected species (ETPs), critical habitats, and the ecosystem. This reflects the new societal expectations regarding fishery management and conservation opening a gap between these and the formal RFMO mandates "frozen" within their formal target species-focused agreements. The changes in attitude and action that are required include: (i) Reduced tolerance for depletion of the target and ER species; (ii) Increased compliance with UNCLOS provisions regarding ERS and improved interaction with IUCN, CITES, CBD and ENGOs; (iii) Adoption and implementation of the Ecosystem Approach, maintaining the structure and function of the ecosystem.

The cost/benefit ratios of the different possible rebuilding strategies should be a concern. Considering the Strategic Plan's reference to the possibility of using MEY as the rebuilding SBT target, the issues related to the cost of research and management, it would seem useful to start adding some economic component to the presently exclusively bioecological foundation of CCSBT decision-making. The CCSBT has adopted an interim rebuilding target and in the future, may be considering shifting the ultimate one from MSY to MEY. However, it has not yet adopted a reference rebuilding curve (although there may be an implicit one in the MP). Different trajectories (within the same limit and target references) would have different cost/benefit ratios and the CCSBT is in a good position to innovate in this area. The present decisions, while not explicitly grounded on economics have an economic implication that is not transparent for the policy-makers and industry.

Since 2008, the CCSBT has made considerable strides in improving its performance but there remain a number of areas in which it needs to improve, and the fact remains that the SBT stock continues to be in deleterious condition. The international community, the market and consumers are demanding more and flag States are increasingly being asked to provide proof of sustainable fisheries that respect the wider marine ecosystem, operate legally, and safeguard the wellbeing of those that work in the fisheries sector.

The CCSBT has a small number of Parties, including six of the most developed nations or economic entities on the planet. It is entrusted with the management of a single, highly valuable stock, and has, compared to other tuna RFMOs, a relatively smaller number of vessels to monitor[3]. These conditions are unique among the tuna RFMOs, and should provide few obstacles for the CCSBT to both succeed in adopting modernized measures (which it is doing) but also effectively implement them such that the SBT stock recovers in a timeframe that is less than a generation. The CCSBT Strategic Plan should play a key role in the future in organizing the CCSBT work while providing a clear frame for performance assessment.

[3] The CCSBT has to deal with approximately 2000 fishing vessels and carriers combined when the WCPFC Authorized Vessel Record has over 6000 vessels.

The authors sincerely hope that this Report does justice to the efforts developed by CCSBT to consider and implement the numerous recommendations produced during the Kobe process and will contribute to the its effort, and that the parties and CNMs towards giving effect to the good intentions expressed in the Strategic Plan, for the sustainable use and conservation of the SBT, its ecosystem and its fisheries.

Last but not least, the CCSBT Strategic Plan (adopted in 2011), with its structure, goals, strategies and foreseen activities represents a most comprehensive instrument to plan for the future of the CCSBT and the actions it needs to meet its medium and long-term challenges. The Strategic Plan reflects quite accurately the Recommendations of the first Performance Review and the Kobe Criteria. It anticipated a lot if not all of our present recommendations and, functionally connected as it appears to be with the Performance Review, it seems “hard wired” to meet the best international standards and practices. .

The authors sincerely hope this report will contribute to the CCSBT effort, and that the parties and CNMs will succeed in giving effect to the good intentions expressed in the Strategic Plan, for the sustainable use and conservation of the SBT, its ecosystem and its fisheries.

1. INTRODUCTION

In October 2006, the Commission for the Conservation of Southern Bluefin Tuna (CCSBT), decided to undertake a review of its performance using a recommended common set of criteria and a methodology agreed at Kobe I meeting (Kobe, Japan, in 2007) by the five Regional Fisheries Management Organizations in charge of managing the world's fisheries on tunas and other highly migratory species (hereafter referred to as t-RFMOs). The methodology involves a self-assessment by the t-RFMO and its review by independent experts[4]. The first self-performance assessment of the CCSBT, conducted in 2008 by a Performance Review Working Group (PRWG), and the review of its report by Ambassador David Balton, offered suggestions and recommendations to improve the performance of the CCSBT. Since 2008, the CCSBT has been working actively to fill its mandate as provided in its 1994 Convention, broadening progressively its scope to start covering the collateral environmental impact of the southern bluefin tuna (SBT) fisheries and implementing as fully as possible the recommendations of the first Performance Review.

In 2014, the CCSBT undertook its second Performance Review. It updated the background and status of the matters referred to in the first self-assessment reports and provided the material for information to an independent Performance Review Panel (PRP) comprising:

- Dr. Serge M. Garcia: former Research Director of the Institute for Research on Development (IRD, France); Former Chief Marine Resources Service (1984-90) and Director of the Marine Fisheries and Aquaculture Management Division (1990-2007) of FAO; Presently Chair of the Fisheries Expert Group of the Commission on Ecosystem Management of IUCN (IUCM-CEM-FEG). Chair of the PRP.
- Holly R. Koehler: Former senior foreign affairs officer, specializing in Pacific fisheries policy and United Nations fisheries issues, in the Office of Marine Conservation, Bureau of Oceans, Environment and Science, Department of State (USA, 1999-2012). While at the Department of State, she chaired the UNGA sustainable fisheries resolution negotiations for 10 years, participated actively in the WCPFC Commission and U.S. Tuna Treaty meetings and led the U.S. delegation in the negotiations to establish the SPRFMO treaty. She is now the Vice President for Policy and Outreach at the International Seafood Sustainability Foundation (ISSF).

The PRP was asked to evaluate (**cf. Annex 1**):

- The performance of the CCSBT using the agreed criteria developed following the Kobe I meeting, already used for the first review;
- CCSBT's progress in implementing the recommendations from the Performance Review as documented in the Report of the Performance Review Working Group and the Report of the Independent Expert on the Performance Review; and
- The extent to which modern fisheries management standards have been incorporated into the CCSBT's decisions.

The resources provided by the CCSBT Secretariat to the PRP included:

[4] i.e. experts that are neither associated with any of the t-RFMO parties nor worked for the t-RFMOs secretariats.

- The original Report of the Performance Review Working Group (2008) and Report of the Independent Expert (David Balton) on the Performance Review (2008);
- "Marked-up" versions of the above reports that identify decisions, changes and progress made against recommendations in these reports. These versions were prepared by the Secretariat and circulated to Members for amendment and additions prior to being provided to the PRP;
- All other publicly available CCSBT meeting reports, documents and data requested by the PRP as well as available in the CCSBT website; and
- Access to Secretariat staff, independent Chairs (including Compliance Committee, Extended Scientific Committee and Ecologically Related Species Working Group) and Members to respond to questions from the panel.

This report describes first, the methodology followed for the review, including its contacts and sources of information (Section 2). It then provides the concise findings of the review following the structure of the Self-Assessment Report (SA-2008) because it is coherent and to facilitate cross referencing (Section 3). In order to facilitate the reading by CCSBT members, this section reproduces the recommendations of the SA-2008 report and the Report of the Independent Expert on the Performance Review (PR Report). The report concludes on an overall analysis of the performance of CCSBT in relation to modern international fisheries management criteria, standards or good practices (section 4).

In writing this report, efforts were made to avoid redundancy with the information contained in the marked-up versions of the 2008 SA and PR reports, ensuring however that the report can: (i) stand alone; (ii) contains the elements needed to judge the objectivity of the analysis and (iii) be understood in context by the wider public when posted on the CCSBT website.

We hope that this report does justice to the efforts developed by CCSBT to consider and implement the numerous recommendations produced during the Kobe process, in Kobe I (Kobe, 2007), Kobe II (San Sebastian, 2009) and Kobe III (La Jolla in 2011), as well as during the working groups held in 2010 in Barcelona and Brisbane. The report also highlights the areas in which more efforts are needed in the continuous dynamic process of adjusting CCSBT's actions to changing natural and governance contexts.

Acknowledgements

The independent PRP expresses its grateful thanks to the CCSBT Secretariat and particularly Robert Kennedy for his immense patience and reactivity when faced with our numerous requests for clarifications, confirmations or requests for additional information. We found the transparency and objectivity we needed and the CCSBT website appeared to us as very helpful, well-structured and rich. We also express our thanks to our colleagues Alejandro Anganuzzi (FAO), Jean-François Pulvenis de Seligny, John Annala, Steve Cunningham and Joseph Catanzano for their suggestions and clarifications.

2. METHODOLOGY

2.1 Sources of information

The sources of information put at our disposal by the CCSBT Secretariat included:

- The original and marked up versions of the Report of the Performance Review Working Group (Self-Assessment Report, 2008) and the Report of the Independent Expert on the Performance Review (PR Report, 2008);
- A supplement to these reports, provided by the CCSBT Secretariat at our request, indicating the course of action decided by the Extended Commission in response to the recommendations of the Extended Scientific Committee (**cf. Annex 3**):
- The CCSBT website, particularly the sections on: the Convention; conservation and management; authorized vessels and farms; stock assessment and science, monitoring, control and surveillance, and meetings (for annual reports and in particular for deliberations regarding governance, compliance, administration and funding);
- The CCSBT Secretariat itself, either through direct contact of opportunity (during convenient meetings, in March and June 2014) and through email.

In addition, we used as source of recommendations, guidance, "standards" and best practices that are applicable to tuna RFMOs:

- The Kobe I (Kobe, 2007), Kobe II (San Sebastian, 2009) and Kobe III (La Jolla, 2011) reports as well as the reports of the Kobe II working groups on: (i) scientific advice (SAWG) and on Monitoring, control and surveillance (MCSWG) in Barcelona in 2010; (ii) bycatch (BCWG) and tuna fisheries management (TMWG) in Brisbane in 2010). The recommendations of these WGs have been formally agreed to by CCSBT (according to the CCSBT Report, Agenda item 7) and are therefore relevant for this Performance Review.
- Other internationally recognized sources of RFMO standards and best practices such as: UNCLOS (1982), UNCED (1992), CBD (1992); UNFSA (1995); Code of Conduct for Responsible Fisheries (CCRF) (1995) and the four FAO International Plans of Action (IPOAs); World Summit on Sustainable Development (WSSD) (2002); and the relevant UNGA resolutions on oceans and fisheries;
- Journal articles on RFMOs standards and performance, as a source of external, peer-reviewed information and advice (Cf. Bibliography);
- Direct contacts with:
  a. Robert Kennedy, Executive Secretary, CCSBT. Meeting in Rome (11/03/2014): first analysis of Part 1. Questions and clarifications;
  b. Alejandro Anganuzzi (FAO), Former Secretary IOTC, about the Kobe process and relations between the t-RFMOs in general;
  c. Jean-François Pulvenis de Seligny, on legal matters regarding regional fishing capacity management and inter-RFMOs coordination;

d. John Annala. Independent Chair of the CCSBT ESC

e. Steve Cunningham and Joseph Catanzano. Fishery economists from IDDRA, consulted on matters related to research and management economics (http://www.iddra.org/index.htm)

We did not undertake any exhaustive analysis of the literature to find records of work undertaken on SBT by members and non-members, unless specifically mentioned in the CCSBT source documents.

2.2 Approach

The performance assessment work started in March 2014 and only on documents available before end of June 2014, date at which the report was completed. The work was accomplished mainly through a desk analysis of documents available, augmented by discussions (by email and in person in two occasions, in March and June) with the Executive Secretary, Mr. Robert Kennedy.

In our analysis of the progress made by the CCSBT since the 2008 Performance Review, we considered the 2008 Self-Assessment (SA-2008) and Independent Performance Review (PR-2008) reports to understand the baseline from which our evaluation had to start. We analyzed the progress reported in the marked-up versions of SA-2008 and PR-2008, checked against the Kobe I criteria. We also looked at the extent to which the efforts of the Commission responded to the additional guidance offered at Kobe II (2009), at the Barcelona and Brisbane working groups (2010), and at Kobe III (2011). To facilitate this analysis, we compiled the requirements stemming from the five meetings in a single document (**Annex 2**) representing the combined Kobe criteria that we used as our assessment grid. In this way, we assessed the extent to which the CCSBT has responded to its 2008 performance review and also how it faced the new or more detailed requirements emerging from the entire Kobe Process and related action agenda since 2008. In the process, however, we recognized that the Kobe I-III recommendations were of a more formal nature than those of the working groups.

Finally, we undertook an analysis of the performance of CCSBT in relation to modern international fisheries management criteria, standards or best practices that were drawn from relevant international instruments, the Kobe Process (where not already considered), UNGA resolutions, FAO IPOAs and guidelines, and other internationally recognized sources as outlined in **Section 2.1**.

Our draft report was discussed informally with the CCSBT Executive Secretary in early June to clarify a few queries and check whether the draft report contained any misunderstanding from our part. The final version of our performance assessment was sent to the Secretariat at the end of July.

3. AN EVOLVING INTERNATIONAL CONTEXT

In 2006, CCSBT 13 agreed that there was an immediate need to modernize the Commission to improve its capacity to achieve its fundamental goals (effectiveness) and in the way it used its means to achieve them (efficiency). Since then, the CCSBT has made progress, some of which already evident in the first assessment undertaken in 2008. More work has been done since, that has modified the functioning and institutional structures of the CCSBT. At the same time, however, the international context has evolved challenging the institution to improve its performance with regards to the 2008 assessment, while also facing new requirements that are modifying the international landscape within which the Commission operates and against which its performance judged. Important actors in this change process include the UNGA, FAO, the CBD, various international conventions (CMS, CITES), as well as the fishing industry and environmental NGOs, with differentiated prerogatives. The CCSBT participated directly in shaping that changing landscape through the action of its members in the above cited mechanisms. CCSBT also participated actively in the Kobe Process, with all the other tuna RFMOs, and in so doing helped to define an emerging set of common modernized standards or best practices expected of RFMOs. The following sections highlight some of that context, first in general terms and second more specifically for tuna RFMOs.

3.1 The international processes

The UNGA

The United Nations General Assembly (UNGA) plays a critical role, providing highly regarded global policy guidance and a harmonizing framework to ensure coordination within and between RFMOs through its Resolutions on Sustainable Fisheries and on Oceans and the Law of the Sea, on issues touching, *inter alia*, on: (i) the Regular Process of assessment of ocean living resources (to be completed in 2014); (ii) Information sharing (e.g. on fishing, bycatch, discards, IUU, compliance); (iii) the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction (BBNJ WG); (iv) the implementation of the Precautionary Approach and reference points; (v) the Ecosystem Approach to Fisheries; (vi) Regional and sub-regional cooperation; (vii) Capacity-building (particularly in developing coastal States and SIDS); (viii) management of particularly vulnerable species (e.g. sharks, mammals), habitats and ecosystems; (ix) the conservation of fisheries and the performance and functioning of RFMOs; (x) the duties and obligations and performance of flag States; (ix) combating IUU fishing; and (iix) more generally progress in implementation of the UNFSA.

The UNFSA Review Conference

The Review Conference on the UNFSA was held in 2006 (before the first performance review) and was resumed in 2010. Both sessions examined recommendations regarding UNFSA implementation and considered additional means to strengthen such implementation. There is a large overlap between the issues considered by the UNGA and reflected in the outcomes of the Review Conference. The 2006 Conference focused *inter alia* on RFMO performance in terms of compliance, transparency, accountability, and timeliness; application of the compatibility principle; monitoring control and surveillance (MCS); and capacity building. The 2010 Conference is particularly relevant to this report as

it provided a formal legal backdrop to the ongoing change of CCSBT after the 2008 Performance Review. These considerations related to: (i) Data collection and sharing, including on SSFs; (ii) Precautionary and ecosystem approaches; (iii) Management of fishing capacity (with reference to the FAO IPOA); (iv) Management of vulnerable species (e.g. sharks); (v) Compatibility Principle; (vi) Potential use of area-based management tools (MPAS); (vi) Impact of lost or abandoned gear; (vii) Decision-making rules and procedures; (viii) Encouraged participation in RFMOs; (ix) Cooperation with non-members; (x) Flag States duties and compliance (performance); (xi) Port States measures; (xii) Use of on-board observers; (xiii) boarding and inspection; (xiv) Regulation and control of transshipment; (xv) Market related measures (Catch documentation); (xvi) International collaboration on MCS; (xvii) Global Record of fishing vessels; (xviii) capacity-building; (xix) Impact of climate change; (xx) RFMOs collaboration; and (xxi) Flag State performance, individually or through RFMOs.

Other international processes

FAO has been active producing voluntary instruments, guidelines and Plans of Action of relevance to the management of international fisheries, which complement the LOSC and UNFSA or facilitate their implementation, such as: (i) the Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing, hereafter the Port States Agreement (2009); (ii) various technical and international guidelines (e.g. on the Precautionary and Ecosystem Approaches and Deep Sea Fisheries) and International Plans of Action (IPOAs) (e.g. on management of capacity, management of sharks, to combat IUU fishing, etc). The FAO voluntary guidelines for Flag State Performance, for example, should be considered and endorsed by COFI in June 2014.

The CBD and IUCN regularly address the issue of conservation and sustainable use of biodiversity in EEZs and beyond national jurisdiction, producing additional policy norms and guidance of relevance to tuna fishing. For example, the CBD requires an Ecosystem Approach to sustainable use of biodiversity that ecosystems goods and services be used while *maintaining the structure and function of the ecosystem* (the Malawi Principle N°5). In addition, and while the initial focus has been on deep sea benthic ecosystems, the CBD process of identification of “Ecologically and Biologically Significant Areas” (EBSAs) has also drawn attention on the need for pelagic EBSAs, of direct relevance for tuna fisheries. The IUCN Red List of Threatened Species is also relevant to the CCSBT work on ERS.

The Commission on Migratory Species (CMS) has competence of highly migratory species in general and has adopted plans for the conservation of sharks and porpoise in 2012.

The INTERPOL International Fisheries Enforcement Conference (which met for the first time in 2013) is an initiative aimed to detect, combat and suppress fisheries crime and improve the exchange of fisheries enforcement information and intelligence between countries. It has led to the establishment of a permanent INTERPOL Fisheries Crime Working Group[5].

[5] http://www.interpol.int/Crime-areas/Environmental-crime/Events/Meetings/1st-INTERPOL-International-Fisheries-Enforcement-Conference

3.2 The Kobe process

The 2007 Kobe I *Course of Action* put the emphasis on actions needed to improve tuna RFMO performance, regarding particularly: (i) management efficiency; (ii) stock-rebuilding; (iii) the use of the best scientific evidence and advice available; (iv) the adjustment of fishing capacity to biological productivity; (v) strengthening of MCS; (vi) improvement of compliance; and (vi) the development of RFMO performance criteria related to the above.

The 2009 San Sebastian meeting (Kobe II) focused on implementation of the Kobe I *Course of Action* and recommended a number of actions including: (i) the establishment of a global Register of active tuna vessels; (ii) robust compliance review mechanisms; (iii) better articulation of risk and uncertainty in scientific advice; (iv) improved management of sharks; (v) adoption of Unique Vessel Identifiers (UVIs); and (vi) harmonization of IUU vessel lists.

The 2011 La Jolla meeting (Kobe III) emphasized again the need for practical action regarding: (i) information sharing across RFMOs; (ii) decision-making Guidelines; (iii) harmonization of IUU vessels lists; (iv) standardized report cards to assess Parties' compliance; (v) the FAO Port States Agreement; (vi) Catch Documentation Schemes; and (vii) a global list of authorized Active Tuna Vessels (ATVs) to eliminate double counting.

Together, the last two meetings emphasized the importance of uncertainty and risk in decision-making, members' compliance with decisions, and MCS.

The two Kobe working groups (held in 2010 in Barcelona and Brisbane) produced a number of additional recommendations or guidance regarding the main topics outlined in the Kobe I Course of Actions and Kobe II meeting results.

4. EVALUATION OF PERFORMANCE

The assessment of performance of RFMOs should formally be done in relation to UNFSA requirements as provided, for example, for data collection and sharing, in Article 14 and Annex 1 of the Agreement. However, because of the global nature of the Agreement, these requirements tend to be rather generic and insufficient to measure performance in a sufficiently meaningful way. The UNFSA leaves to the States, individually or through their organizations and arrangements, the responsibility to define the requirements in more detail.

The UNFSA requirements (that might be considered "*minimum requirements*") are well reflected in the Kobe Criteria. In general, the CCSBT has taken some and often substantial action on all the UNFSA requirements, formally agreeing on more detailed mandatory specifications, e.g., on time frames, standards, etc. Performance assessment (including compliance) is therefore better done in relation to the more detailed requirements adopted within the CCSBT itself and reflected in its Resolutions, Guidelines and Plans.

In this section, we will therefore, first, recall the Kobe criteria we use as benchmarks and the recommendations of the first Self-Assessment (SA-2008) and first Performance Review (PR-2008) before providing our understanding and evaluation of progress against these recommendations and criteria and our recommendations.

As described in the Methodology section (see **Section** 2), the following analyses use the Kobe I criteria as the core set of benchmarks. However the recommendations of the Kobe II and III meetings were also reviewed, and where possible, incorporated by reference into the Kobe I benchmark criteria. A consolidated set of the Kobe I, II and III meetings recommendations is provided in **Annex 3** together with the further guidance provided through the four 2010 working groups recommended by Kobe II. This approach allowed this report to take a more comprehensive review of the performance of the CCSBT since 2008 within the evolving context of the Kobe action agenda and its criteria. This report does not, however, use the recommendations or guidance from the 2010 Kobe working groups in its analysis of the CCSBT's performance since 2008 as the results of these working groups are more informal and advisory in nature. Nonetheless, if the CCSBT has taken steps that align with the outcomes of these two Kobe working groups, it has been noted.

4.1 Conservation and management

To the extent possible, the sections and recommendations follow the structure of the SA-2008 report, while referring to both SA-2008 and PR-2008 recommendations. It must be noted, however, that there was some duplication and overlap between these (e.g., recommendations regarding data, decision-making, or best scientific advice in the section on stock assessment). In such cases, we relocated the recommendations to the section to which they belonged or cross-referenced strongly related recommendations.

The documents available use terms such as *strategic plan*, *management strategy*, *management plan*, and *management procedure*. Their use is not always consistent. In this document, the terms are interpreted as follows.

- Strategic plan. It is an overarching document adopted by the CCSBT in 2011. Based on the reports of the first Performance Review (in its content and structure) it is an excellent tool reflecting both the common vision, objectives and strategies that the CCSBT intends to follow to achieve effectively and efficiently its overarching conservation and management goals.
- Management strategy. The term is not commonly used by CCSBT and refers generally to the setting of TACs and quotas, with some concern about the capture of juvenile SBT. The management strategy should, by definition provide the overarching frame for management and should be implemented through a management plan (see below). The CCSBT considered a proposal for such a strategy in 1994 but never adopted one. It still does not have one at the moment. The Kobe II meeting in San Sebastian, recommended to use a standard *Strategy Matrix* (K2SM) to harmonize the presentation of the scientific advice to managers in all tuna RFMOs, laying out options for meeting agreed management targets with the probabilities to reach them by a certain time. However, with only one stock (the SBT) to deal with, the usefulness of a K2SM for the CCSBT is not obvious. In addition, the CCSBT has adopted a *Management Procedure* (see below), tested through *Management Strategy Evaluation (MSE),* that accounts for many possible sources of uncertainty, fulfilling the functions of a K2SM. The CCSBT is indeed in the leading group of RFMOs using MSE.
- Management Plan. In the CCSBT context, it refers usually to the management of the SBT fishery and describes the operational objectives (including interim objectives), indicators, measures, implementation means and responsibilities, reporting, monitoring and performance evaluation. Ideally, it should cover the target as well as ERS species impacted by the fishery. The elaboration of such a plan is on the agenda of the Strategy and Fishery Management WG (SFMWG) established in 2008. While the CCSBT has many of the elements to figure in such a plan, it does not have one formally yet, e.g., one that could be nested in its Strategic Plan.
- Management Procedure (MP). It is a more or less "mathematized" algorithm helping to formally define management targets and limits, expected stocks trajectories and pre-agreed courses of action, accounting for uncertainties. The CCSBT has taken a few years to develop one (adopted in 2011) which conveys a precautionary approach in the choice of target and limits and threshold levels at which action is triggered the robustness of which to uncertainties has been tested through simulations (e.g., through MSE).

4.1.1 Status of living marine resources

In this section, we will refer to the Kobe criteria indicating the specific Kobe meeting of origin and report section (e.g. K I; KII, 1; or KIII, 2a) as well as to the recommendations made in the 2008 self-assessment report (referred to as SA-2008-n) and the first independent performance review (referred to as PR-2008-n). A similar numbering is used for recommendations from other sources (e.g. Kobe III-1). For each recommendation, we reviewed the information (facts) available in the different sources we accessed before providing our comments on progress made or pending issues. We also provide our view as to whether the recommendation in question should be considered as: (i) still to be implemented, (ii) being implemented, of a continuing nature, or (iii) totally implemented,

and hence to be archived and in any case dropped from the evolving "dashboard" of the relevant recommendations. Finally, where relevant, we make new recommendations (identified as PR-2014-n); the acceptability of which should probably be formally considered by the CCSBT.

Kobe criteria

a) Status and trends of major fish stocks under the purview of the RFMO in relation to maximum sustainable yield or other relevant biological standards (Kobe I);

b) Status and trends of species that belong to the same ecosystems as, or are associated with or dependent upon, the major target stocks (i.e. non-target species or ERS (KI); Assess the status and trends of sharks (KI.I.11; KII.1f; KIII.5.b.d).

The two relevant criteria refer respectively to the status of the SBT (target stock) and that of ecologically related species (ERS)

SA-2008-1: SBT CATCH AND CPUE DATA.

Support best endeavours of the ESC to recreate historical catch and catch per unit of effort series for the fishery but give maximum priority to accurate reporting and validation of future catch and effort.

Catch and effort data are absolutely fundamental for any RFMO and indeed any national or international fishery management agency. Best estimates of past catches have been produced by the ESC even though large uncertainty remains. Significant efforts have been made to improve accuracy and verification of the presently collected data and a Code of Practice for Scientific Data Verification[6] has been elaborated. Monitoring has been improved with Scientific Observer Programme Standards (with a 10% vessel coverage)[7]. The CDS has been implemented[8]. The adoption of a Management Procedure in 2011, has given to fisheries data collection and processing even more fundamental importance than ever.

Examples of uncertainties leading to more or less open frictions include**:** (i) Australia's estimated weight of SBT retained by recreational fisheries (and not yet reported by Australia. Small amounts reported by New Zealand) should be counted against allocations; (ii) A range of sources of mortality that are not currently well estimated including discards from longliners, artisanal catch, bycatch of SBT, and illegal fishing (CCSBT19, 2010t).

Considering the difficulties and uncertainties in recreating past data, this PR agrees on the need to focus on present and future data accuracy, carrying forward in the assessment and decision-making the uncertainty created by the partial ignorance of past catches.

PR-2014-1: The original recommendation remains valid and efforts should continue in the same direction.

[6] http://www.ccsbt.org/userfiles/file/docs_english/operational_resolutions/HighLevel_CodeofPractice_DataVerification.pdf

[7] http://www.ccsbt.org/userfiles/file/docs_english/operational_resolutions/observer_program_standards.pdf

[8] http://www.ccsbt.org/userfiles/file/docs_english/operational_resolutions/Resolution_CDS.pdf

PR-2014-2: The compliance with and efficiency of the Data Verification procedures should be regularly checked.

PR-2008-1: ROBUST SBT STOCK ASSESSMENT METHODOLOGY

Develop stock assessment methodologies that are robust to past under-reporting.

The Stock Assessment Group (SAG) was disbanded in 2008 as the Operating Model and Management Procedure Technical Group (OMMP) took over some of its tasks (in 2009) strengthening the capacity to produce management advice taking better account of operational realities and uncertainty (need for precaution)..

The development of stock assessments using a range of scenarios, fishery independent data sources (aerial survey and close-kin abundance estimates) and examination of specific fishery indexes (1 year old troll survey) have increased the precautionary character of the assessments and the foresight capacity.

This recommendation will remain valid for a long time, until a sufficient catch history becomes available. Indeed, considering the risk of mis-reporting in high seas fisheries, this type of vigilance should probably remain part of the good practices anyway.

PR-2014-3: The CCSBT ESC should undertake from time to time (e.g. every 5-6 years) an assessment of the robustness of the assessments, e.g. through retrospective analysis, comparing past forecasts with subsequent realizations.

PR-2008-2: PRECAUTIONARY APPROACH TO SBT MANAGEMENT.

Take a precautionary approach to management and lower the TAC as the uncertainty increases (PR).

The spawning biomass is still only 23% of the biomass at MSY and about 5% of the estimated virgin stock biomass. This confirms –and is not a surprise- that the stock remains heavily overfished. The situation is made more critical by the heavy uncertainty on past reported catches and hence on understanding of trends. This has jeopardized the stock assessment from 2005 to 2011 and delayed the availability of a Management Procedure to guide the TAC determination.

In 2010, the CCSBT modified its rules of procedure to specify that: (i) The Scientific Committee shall incorporate advice consistent with the precautionary approach in its advice to the Commission; and (ii) The Commission shall articulate the rationale for its decisions, including where they differ from the science advice provided to the Commission, for inclusion in the report of every annual or special meeting …".

Since 2011, The TAC is determined using an adaptive MP that incorporates uncertainty, evolves as new data is acquired, and that is applied with an overarching metarule calling for special measures if unexpected conditions emerge when the implementation of the total allowable catch (TAC) generated by the management procedure (MP) would be considered (by the ESC and agreed by the CCSBT) to be highly risky. The metarule does not define *exceptional circumstances* but instead pre-specifies the process to be followed in case of emergence of such circumstances.

The approach, combined with the precautionary approach used for stock assessment, reflects international standards. The TACs determined using the finally adopted MP (the Bali procedure) are intended to provide a 70% probability to rebuild the stock to 20% of the virgin stock biomass level by 2035. The 20% level is usually considered as a minimum safe biological limit under stable, long-term equilibrium consequences. In the perspective of climate change and the long-term changes it may produce in stock productivity, distribution and spatial exploitation patterns, there is a risk that the MP robustness be seriously challenged. The risk is mitigated, however, by the adoption of the metarule process that should trigger tougher measures if needed. It is not clear, however, if the efficiency of the metarule and its robustness, have been tested to see if the management system and the stock would react fast enough to avoid collapse in case of a sequence of bad recruitments related to sustained and possibly chaotic climate change.

It should also be noted that, recognising uncertainties related to unaccounted catch mortality, the EC has agreed the concept of "Attributable SBT Catch" for all Members and CNMs that would include all sources of mortality and that an allocation be made for Research Mortality Allowance (RMA)[9] within the TAC. A definition and a time table for implementation of the Attributable SBT Catch starting in 2015 might be agreed at the 2014 CCSBT meeting.

PR-2014-4: The recommendation, in its present form might be considered as fulfilled as long as the MP / Metarule "tandem" function properly (See PR-2008-3 on SBT stock rebuilding strategy).

PR-2014-5: In the future, the CCSBT could undertake to test the robustness of the MP to climate change. It should also take every opportunity to give priority to stock rebuilding above increasing catch, when exceptional positive recruitment spikes occur above the variations against which the MP has been tested.

PR-2008-3: SBT STOCK REBUILDING STRATEGY

Determine management objectives and rebuild strategy consistent with UNFSA requirements[10] to guide future scientific assessments. Set TACs at a level that will allow the stock to rebuild.

The overarching and long-term management objective of the CCSBT, from Article 3 of the Convention and as referred to, for example on the 2011 Strategic Plan, is "simply": *to ensure, through appropriate management, the conservation and optimum utilization of southern bluefin tuna.* Intermediate objectives regarding the target species are easier to find than for ERS.

The CCSBT's rebuilding strategy includes: (i) TAC setting in accordance with the MP tuned to a 70% probability of achieving 20% of the original spawning stock biomass (interim rebuilding target) by 2035; (ii) Inclusion of fishery independent data in both the MP and

[9] While the RMA was identified many years ago, the need to deduct it from the TAC was agreed in 2013 (Report of CCSBT 20, section 9.2)
[10] i.e. using Bmsy as a minimum standard for le target rebuilding level.

stock assessment; (iii) In-depth stock assessments every 3 years[11]; (iv) Examination of fisheries indicators and evaluation of exceptional circumstances every year (Meta rule);and (v) A suite of MCS measures to improve confidence in the data and reduce opportunities for IUU fishing.

In the long term, the CCSBT plans (in its Strategic Plan) to evaluate, alternative harvest strategies to optimise returns from the SBT stock including the possibility of using MEY as the ultimate rebuilding reference point.

Fishing mortality has decreased below the F_{msy} level (as indicated in the SA-2008) and the decrease in biomass seems to have been arrested. The projected increases in stock size would indicate (assuming that no other factor is acting) that the effects of the management measures of the last few years are going into the right direction, towards rebuilding. The signs of increasing recruitment (whether management or climate-driven) and decreasing depletion rate (observed following the introduction of close-kin genetics in the assessment) are positive factors.

The MP guides the TAC determination to a level leading to progressive rebuilding. However the year-to-year variations of the various fisheries indicators make this projection uncertain and the signals of rebuilding are very weak. The strategy is consistent with UNFSA in that it aims at rebuilding the stock at least to MSY level but the transitional objective remains very risky, particularly in the context of climate change. It will take a long time (decades) to rebuild the stock unless climate improves significantly the stock productivity.

PR-2014-6: Every effort should be made to enhance (speed-up) the rebuilding trajectory in line with the precautionary approach to fisheries (cf. PR-2008-2). Special efforts should be made to identify additional measures (e.g. protected areas) to support spawning and recruitment and improve resilience to fishing and climate change.

SA-2008-2: SUSTAIN THE RESEARCH PROGRAMME

> *Make the maximum effort to implement the items which have been identified and prioritised by the Extended Scientific Committee in the CCSBTs Scientific Research Program (Attachment 9 of the SC12 Report)*

The programme prioritised by ESC12 included: Catch characterization; CPUE interpretation; Maintaining a spawning biomass index; Develop/strengthen a scientific observer programme; Continue SBT tagging; Establish a recruitment monitoring; Develop/pursue the application of direct aging methods; and develop a Management Procedure (SA). The marked-up SA-2008 indicates that these programmes have been going on except for the stereo video experiment (for Purse seiners catch estimates), that has been interrupted for practical reasons related to feasibility, and some low priority items.

While the areas and priorities may change in the future, the recommendation to implement the scientific programme is essential to comply with the requirement to improve the best

[11] The in-depth stock assessment uses all available indicators, new growth and mortality estimates, close-kin SSB estimates, R indices, the SRR, all indicators, etc. to calculate the SSB stock and make forecasts. It also considers the overall reliability, coherence, of the OM developed in many places by different people. (SC 2010 § 128

scientific information available. It remains therefore valid. More collaborative efforts could be developed in relation to climate change.

PR-2014-7: The CCSBT could consider the feasibility of a collaborative programme (between RFMOs and institutions competent in biodiversity conservation) to assess ex ante the likely impacts of climate change on the tuna ecosystems, the SBT, the ERS, their productivity, distribution and resilience. The outcome of this work would indicate which ocean parameters could be usefully monitored to better inform the Meta Rule of the MP Process.

SA-2008-3: ERS RISK ASSESSMENT

Assess and monitor, directly of with other RFMOs, the risks and impacts on ERS and adopt a mitigation strategy.

The Ecologically-Related Species WG (ERSWG) was established since the onset of the CCSBT underlining the importance it attaches to collateral impact on dependent and associated species. The ERSWG meets approximately every 2 years and reports through the ESC. The lengthening of the ESC meeting and the holding of the OMMP two months before the ESC provides the first with more time to operate, and allows the second to receive better advice and elaborate better recommendations for management. In 2012, the CCSBT agreed on an annual ERS Data Exchange between members and the Secretariat. The first exchange occurred in 2013. The exchange with other RFMOs concerns only reports and results (no data). The seabird impact mitigation measures have been upgraded from simply using Tori poles to a more integrated strategy. A first general Ecological Risk Assessment (ERA) in relation to ERS was conducted in Australia[12] concluding that the impact was minimal in the Australian purse-seine fishery. The ERSWG has: (1) Conducted (through New Zealand) an Ecological Risk Assessment (ERA) for seabirds in 2012 and 2014 and is planning to continue and improve it; (2) Initiated work to measure effectiveness of seabird mitigation measures; and (3) is preparing an assessment of southern hemisphere porbeagle shark populations.

Except for Porbeagle shark, the CCSBT relies on assessment work conducted by its members. Information on ERS have increased after the 2008 PR. The marked-up SA-2008 report indicates that: (1) Many species of albatross and petrels "Red-Listed" by IUCN exist in the SBT fishing area. Species most particularly vulnerable to SBT longline fisheries and higher risk areas have been identified through Ecological Risk Assessment (ERA); (2) A transfer of effort from SBT fisheries to other longline fisheries in in higher latitude has occurred presumably reducing by catch in the SBT area; (3) Porbeagle sharks have been listed by CITES, underlining their vulnerability and threatened state and an SBT WG will work towards assessing formally that species; and (iv) Shark species at risk, of relevance to CCSBT fisheries, have been identified by other RFMOs,

Progress has been steady but slow. It is clear that CCSBT's own capacity to conduct assessments is on ERS limited. It is also clear that more efforts have been made since 2008 on the main species impacted by the SBT fishery (apparently seabirds, and sharks).

[12] http://www.environment.gov.au/system/files/pages/0c373548-1124-4e99-bda8-5f2bb7e99362/files/sbt-attachmente-erm.pdf

PR-2014-8: The CCSBT should specify the mitigation strategies for each ERS, area and fishery with their objectives (short and long-term), management and enforcement measures, and performance assessment. Considering the amount of work this represent, each strategy should also specify the order of priority given by the CCSBT to the different ERSs, areas and fisheries, and it should record its rationale for these decisions.

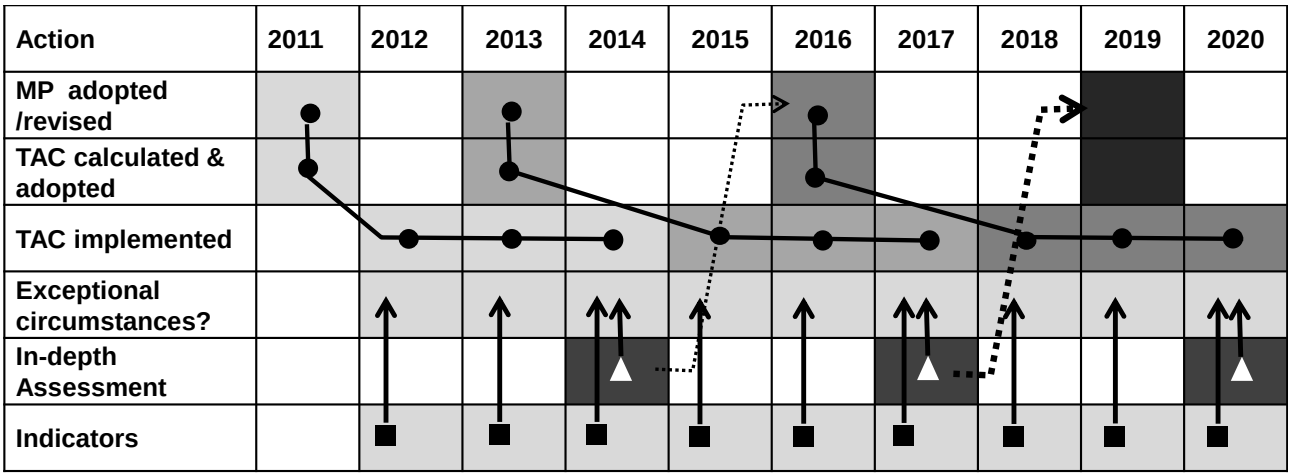
SA-2008-4: DECISION-MAKING PROCESS

To base decisions on periodic full assessments of the SBT stock and establishing a rebuild strategy.

After 9 years of developments and negotiations, the CCSBT adopted, in 2011, a Management Procedure (MP) to be applied from 2012 onwards. The MP is tuned on a Harvest Control Rule to rebuild the stock to 20% of the virgin stock biomass (SSB_0) by 2035 with a 70% probability of success. The maximum and minimum allowed changes in annual TAC are 3000 and 100 tonnes respectively. The adopted triennial TAC will be implemented by default every year unless **exceptional circumstances** emerge (in application of the **Meta Rule**) (**See PR-2008-3 Stock-rebuilding strategy)**. In the initial process, the 2011 MP was used to calculate the first triennial TACs (2012-2014). For the second (2015-2017) and subsequent triennial TACs periods, a time lag of one year is foreseen between the TAC calculation and its implementation (i.e. the 2015-2017 TAC has been calculated in 2013 and the 2018-2020 TAC will be calculated in 2016). The 2014 TAC will be confirmed or otherwise depending on the value of the calculated 2015 TAC. In the future the MP implementation is foreseen as follows:

1. The MP is adopted in year (t) (let's call it MP_t). It is valid in principle for 6 years, until year (t+6). If its overall performance (in guiding the stock and fishery towards the objectives) during that period is deemed improvable by the ESC, it will be modified in the subsequent 2-3 years. The MP_t might also be revised at mid-term, at year (t+3) if the results of the in-depth stock assessment (see point 4 below) were substantially outside the range foreseen (expected) in the MP, or if other informations indicate a need for its revision.
2. The MP_t is used on year (t) to calculate a triennial TAC -for the years (t+2) to (t+4)- that would satisfy the Harvest Control Rule. The ESC recommends it to the CCSBT which may adopt it or modify it (e.g. as done for 2012 and 2013);
3. The (t+2) to (t+4) annual TACs adopted by the CCSBT are implemented in due course unless Exceptional Circumstances emerge for that year that may invalidate the MP. Such circumstances are appreciated based on the fishery indicators and any other relevant data or information on the stock and fishery. If they occur, the previously adopted TAC may be more or less modified depending on the seriousness of the emerging concern and following an ESC recommendation. This illustrates the fact that the MP is adaptive**,** in line with the precautionary approach and the principles of good governance.
4. In-depth stock-assessments are conducted every 3 years, in years when new TACs are not calculated, e.g. in 2014, 2017, etc. If the results appear to be outside the

MP bounds or other information indicates the need to revise the MP, a review will be undertaken in the following 2-3 years.



No lag for the first application of the MP for the 2012 TAC

TAC_{2014} will be the 2011 or the 2015 value if smaller

Mid-term revision of the MP, every 3 years based on in-depth stock assessment

End-of-term overall performance assessment of the MP

Figure 1: CCSBT decision support process for elaboration and implementation of the Management Procedure, TAC calculation and detection of exceptional circumstances (metarule)

PR-2014-9: It can be considered that the recommendation is being implemented and has been integrated in the CCSBT best practice. No more recommendation needed.

4.1.2 Data collection and sharing

Kobe Criteria

The extent to which the CCSBT:

a) Agreed on formats, specifications and timeframes for data submission, taking into account UNFSA Annex I (KI.I.1), for scientific and compliance purposes. Adopted Standardized report cards on data submission to track Parties' compliance with their obligations (KIII, Annex 3, 1.1);

b) Members and cooperating non-members, individually or through the RFMO, collect and share complete and accurate fisheries data concerning target stocks and non-target species and other relevant data in a timely manner (KI);

c) Gathers data on fishing and fishing vessels and share them among members and RFMOs (KI);

d) Addresses gaps in the collection and sharing of data as required (KI);

SA-2008-5: SBT DATA COLLECTION AND SHARING STRATEGY

Develop a strategy to collect and share data between CCSBT members and RFMOs.

This recommendation has been further strengthened by the following recommendations of the Tuna Fisheries Management Working Group (TMWG, Brisbane 2010):

Establish strong requirements for the provision of accurate data and information to secretariats so that the status of tuna stocks can be accurately assessed. (TMWG-2010)

Members and cooperating non-members make a firm commitment to provide these data on a timely basis, cross-checked with data from market, landings and processing establishments (TMWG-2010)

Data and information collection and sharing are so fundamental to RFMOs functioning and to management that recommendation on data supply, quality, timeliness, harmonization, and exchange have their place in many sections areas of CCSBT performance, e.g. in the section above, dealing with assessments, in this section on data sharing, and the sections below on RFMOs collaboration.

As described in the SA-2008 report and its update, following the discovery of the corruption in past data collection systems, the CCSBT has put data collection and sharing at the heart of its work. A large number of initiatives have been taken and are being implemented even though no specific data strategy has been formally developed and are referred to below. However, looking at the Kobe II and III recommendations, further developments are to be expected regarding, for example, the sharing of non-public data (even though there is a well-coordinated sharing of aggregated data between members and CNMs); of observers, VMS and surveillance data.

Consider [SBT] bycatch by recreational fisheries (KIII.b.e)

The some recreational fisheries of some CCSBT members (e.g. Australia) catch some SBT as target or bycatch species. Efforts to collect the related information are recent. Australia has still to report any catch as the responsibility for data collection rests on the individual States and there is no regular process. A commonwealth-wide process is being studied. New Zealand has started reporting small and decreasing quantities. Whether estimations are included in the stock assessments or not is not clear to us but the amounts involved, while adding to uncertainty, do not seem to be able to bias them significantly. A debate has started as to the inclusion of the recreational fisheries catch into the national quota.

The Indonesian commercial and artisanal fisheries have an important bycatch of SBT and the catch from the artisanal fishery is poorly known.

The full stock assessment being planned by the ESC for 2014 is supposed to examine the impact of unaccounted catch mortality including that of the recreational fisheries (CCSBT 20 report, 2013).

Undertake R&D work to reduce by-catch of juveniles tuna (KI.I.12);

This recommendation is probably aimed at tuna fisheries operating on Fish Aggregating Devices (FADs) and is not very relevant for CCSBT.

PR-2014-10: Based on the above the original SA recommendation might be considered as completed. However the PR suggests maintaining it as a leading title under which for more specific recommendations might be nested as need arise, e.g. regarding the SBT catches in recreational and artisanal fisheries.

SA-2008-6: DATA SPECIFICATION

> *Clear standards are to be set on the type of data and level of detail to be provided by members [and cooperating non-members], in order to ensure the science process has the information it requires.*

The UNFSA requirements for RFMOs on data collection and sharing that underpin the relevant Kobe Criteria are set in Article 14 and Annex 1 of the Agreement. They refer to: (i) Coverage (SS and HMS stocks; Target and non-target species); (ii) Quality (adequate for stock assessment and MCS); (iii) Timeliness (as agreed and appropriate); and (iv) Accuracy (verified). Basic fishery data required includes catch, effort, weight, sex, discards, age, growth, recruitment, stock structure, scientific surveys data on stocks and their environment). Vessel data and information include: (i) Identification number, flag and port of registry; (ii) vessel type and specifications; (iii) Fishing gear description; (iv) Vessel equipment for navigation and communication. The detail needed and data verification (e.g.: location, catch, effort, transhipment, observer programmes) are left to the Flag State and RFMOs to decide. International collaboration is required, *inter alia* to improve research and decision-making capacity.

In the CCSBT, action has been taken on all these requirements, formally agreeing on further detailed specifications regarding, for example, data resolution; report timing; assessment methods; standard advisory and management frames (such as the Management Procedure and Meta Rule); confidentiality rules; precautionary approach; etc. The progress made in this area of work during the last 5 years includes the following:

- The scientific data reporting and exchange requirements of the CCSBT, including details of the data and timelines, are defined each year in the report of the ESC[13,14]. These requirements and the progress in complying with them are apparently also provided in the data exchange section of the private area of the CCSBT web site. We did not access that area.
- *Observers' data are collected in compliance of CCSBT Scientific Observer Programme Standards* but except for highly aggregated ERS-related data, they are considered confidential and are not currently shared unless they are included in scientific papers or in a Confidentiality Agreement signed between the Parties concerned. Under these conditions, compliance with the agreed observer's standards can only be evaluated by Members themselves or through Quality Assessment Reviews (QARs) of this specific aspect of the Members management system.

[13] Further details, including templates and timeframes are available at: http://www.ccsbt.org/site/data_submission_requirements.php; and http://www.ccsbt.org/site/annual_reporting_documentation_requirements.php.

[14] The scientific data exchange requirements for 2014 are available at: http://www.ccsbt.org/userfiles/file/docs_english/general/data_exchange_requirements.pdf.

- Requirements regarding ERS data exchange were agreed in 2012. Implementation started in 2013 and data exchanges will follow on an annual basis[15]. The aggregated scientific observer data is considered as confidential and the access to it requires a confidentiality agreement and approval of the data submitting Member. Members conducting analyses of detailed observer data have provided the results proactively to the ERSWG. The last ERSWG meeting was held in August 2013, and the next is planned for March 2015. The Reporting Templates for the Compliance Committee / Extended Commission and ERSWG were both revised in 2013 to harmonize formats.
- The adoption of a Catch Documentation Scheme (CDS) that replaced the Trade Information System (TIS) has been a major innovation implying significant reporting requirements[16]. The CDS requires documentation on all farm stockings and transfers, landings, transshipments, exports, imports and re-exports of SBT. In addition, each whole SBT must be tagged and measured at the time of kill and details must be sent in electronic format to the Secretariat for checking and processing[17]. All CDS forms issued or received in one quarter must be sent to the Secretariat by the end of the next quarter. Except for one CNM, compliance in substance and timeliness is considered as good. A compliance report is published every year[18].
- The CCSBT maintains lists of authorized farms and vessels (fishing and carrier vessels) of members and cooperating non-members with details regarding the authorized period, the owner, the operator, etc[19]. Farms or vessels holding SBT but not listed are deemed to undertake IUU fishing.
- Monitoring of SBT transshipments at sea is coordinated with IOTC and ICCAT under MoUs. Interoperability between the 3 RFMOs' programs is achieved by treating the IOTC/ICCAT SBT-related data as CCSBT equivalents. The IOTC and ICCAT Secretariat require to be informed about transshipment (including quantities) within 24 hours, while the observer reports are to be sent to them at the end of each trip. This information is then forwarded by the relevant Secretariat to the CCSBT Secretariat.

These achievements are impressive. Except for the observer's data and operational fishery data, data collection and submission has been significantly better defined and implemented. The original recommendation has probably completed its role and, under that

[15] Information available at: http://www.ccsbt.org/userfiles/file/docs_english/general/ERSWG%20Data%20Exchange.pdf
[16] http://www.ccsbt.org/userfiles/file/templates/CCSBT_CDS_CatchTagging_Template.xls
[17] E-template at:: http://www.ccsbt.org/userfiles/file/templates/CCSBT_CDS_CatchTagging_Template.xls
[18] The last report of the Compliance Committee indicates that a number of issues of variable relative importance are on the table and could affect data quality. They relate *inter alia* to: (i) the non-implementation of the stereo video programme in Australian domestic fisheries; (ii) the need to estimate better SBT mortality from all sources; (iii) the uncertainties about the Indonesian Artisanal fisheries landings; (iv) delays with reports submissions; (v) overcatch by some members; (vi) substandard observer coverage; (vi) robustness of some national compliance systems; (vii) the lack of performance standards to assess compliance; etc.
[19] The resolutions relating to authorised vessels, farms and carrier vessels can be found at: http://www.ccsbt.org/userfiles/file/docs_english/operational_resolutions/Ammended_resolution_on_authorised_24m_vessel_list.pdf; http://www.ccsbt.org/userfiles/file/docs_english/operational_resolutions/Resolution_AuthorisedFarms.pdf; and http://www.ccsbt.org/userfiles/file/docs_english/operational_resolutions/Resolution_Transhipment.pdf respectively.

format, as what was required has become normal practice. It could be considered as successfully completed and replaced, in the future by more specific ones.

PR-2014-11: More efforts need to be made to resolve the data confidentiality (regarding observers and operational fishery data) in order to improve the resolution and accuracy of the assessments and precision of the scientific advice.

SA-2008-7: PARTIES' COMPLIANCE

> *All members and cooperating non-members fulfil the UNFSA / Kobe requirements regarding collection and sharing of data (e.g.: Scientific data; Observers' data; ERS data; Catch documentation; Listing of vessels and farms; Transhipment; Data gap-filling; and data confidentiality (SA-2008).* ***See also SA-2008-10.***

Since 2008, the CCSBT has strengthened very significantly its initiatives to improve compliance: (i) adoption of VMS (2008); Control of transshipment at sea (2008) and in ports (2009); (iii) lists of authorized farms and improvements of vessel listing (2008); (iv) Requirement for national compliance action plans (2009); (v) Increased actual observer coverage to meet the recommended target coverage of 10% (2009); (vi) adoption of the CDS (2010); (vii) strengthening of the compliance Committee (2010); (viii) Adoption of a Compliance Plan and recruitment of a compliance manager (2011); (ix) Enhancement of minimum requirements for compliance and agreement on Quality Assurance Reviews (2012); (x) Minimum performance requirement adopted for Transshipment and the CDS (2013); and (xi) Establishment of a Compliance Committee working group to enhance further the minimum requirements (2013, 2014).

Scientific data on SBT are provided on time to the Secretariat and posted on real time on the Secretariat website. The major datasets used for assessments (total catches, catch and effort and catch at size) are made public and sent to FAO-FIRMS following the scientific meeting. ERS data exchange started in 2013. National reports are sent in before the meeting or distributed at the meeting. They are available publicly on request after the CCSBT meeting unless ruled otherwise. Monthly catch reporting, available on the private area, is pursued with good compliance since 2006. In order to fill data gaps, the CCSBT has contributed to funding of the 2013 and 2014 aerial surveys (to complement fishery-dependent data) as well as close-kin studies.

Based on the Secretariat reports, with very few exceptions which are being resolved (e.g. in the case of some data submission by the EU) compliance of members and cooperating non-members (CNMs) with data requirements has been very good. Involuntary mistakes and omissions are swiftly corrected by the Parties. The main issues at present are: (i) one developing Member is still well below the target observer coverage level; and (ii) one developed CNM with a very small allocation has not yet started implementing the CDS.

Finally, the CCSBT has adopted a Compliance Plan and associated policies, including: Minimum performance requirements to meet CCSBT obligations, and Corrective actions policy;

PR-2014-12: The initial recommendation, as formulated, seems to have accomplished its role and could be considered as completed and replaced, in the future by more specific ones.

SA-2008-8: DATA CONFIDENTIALITY

Commercial confidentiality should no longer limit the access to data within the CCSBT. Members should make every effort to ensure that domestic constraints on data provision will not undermine the conservation and management efforts by CCSBT. Members and Cooperating Non-Members fully comply with the confidentiality agreements and provisions within the CCSBT

The confidentiality issue is a thorny one affecting the assessments (impeding finer grain assessments and understanding, particularly in the spatial dimensions of fisheries and management) and reducing transparency, poisoning the relations with civil society and the public. The subject has been thoroughly addressed by CCSBT, essentially to ensure security and avoid leakage of sensitive data.

A working group was established to consider the Rules and Procedures for the Protection, Access to, and dissemination of Data Compiled by the CCSBT adopted by CCSBT 17 in 2010. Data considered as sensitive are exchanged through the Private Area of the CCSBT website. The exchange is controlled by the Secretariat with the data owner Member oversight. The CCSBT has also developed Data Security Standards (SC 2010, attachment 13) and a Data Confidentiality Security Policy[20]. The policy, deals with human resources, physical and environmental security, communication and operational management, access and cryptographic control. The policy contains procedures that regulate release of no-risk data in the public domain. It contains also a Data Confidentiality Agreement. The confidentiality of data on ERS is addressed in the ERSWG Data Exchange protocol[21] and exchange of high resolution data is allowed *only in the case of small WG between Members scientists as part of a mutually agreed cooperative studies* (ERSWG 10, 2013, Item 5). The CCSBT has also adopted a Scientific Observer Program Standards (SOPS) that incorporates minimum requirements for ERS observer data. The access to data depends on the data type::

- No risk data are publicly available. Examples include annual catch estimates or list of authorized fishing vessels;
- Low risk data are available only to CCSBT members and CNMs from the Private Area of the CCSBT website and CDs. Example: monthly catch reporting by Flag States;
- Medium risk data require a specific request for release. Such data may be accessible only to a short list of authorized people. Example: quotas by vessel or company;
- High risk data will not be posted on the CCSBT website or made available on data CDs.

The confidentiality status of all documents used in the CCSBT meetings is explicitly stated in the report of the associated Annual Meeting. The release of *fine scale operational data* remains a major stumble block (as shown in Attachment 5 of SC 2010) despite the fact that there is no evidence of non-compliance with the 2010 Rules and Procedures. The current solution is that Members owning the necessary detailed data may be requested by other

[20] A first draft was made available to the ESC in 2010 (as attachment 1 to the Rules of procedure).
[21] Available in the CCSBT 19 (2012) report as attachment 11

members to conduct specific analyses requiring such data and report to the ESC. This was the case, for example with Japan's CPUE indices and modelling.

The ERSWG Data Exchange process[22] aims at supporting more regular assessments of the ERSWG. It specifies: (i) data to be provided; (ii) frequency and time frame for data provision; (iii) confidentiality. The latter will follow the "Rules and Procedures for the Protection, Access to, and Dissemination of Data" and will be rated as "medium risk". This means that the data will not be publicly available, and that they require specific authorization to be released and may not be placed on the CCSBT Data CD or on the private area of the CCSBT web site (unless in a special part of the Private Area that is further restricted to specifically authorised people).

The best practice in data sharing calls for documents and assumptions related to past stock assessments to be made available (after some time) for evaluation by any interested stakeholder. However, the ESC recognizes that the complete catch information, including unreported catch estimates, used in assessments are not available to stakeholders other than Members and CNMs due to confidentiality. It agrees though that it would be valuable to seek ways of addressing this issue to make the data used in the assessment more transparent. (SC 2010, Attachment 5, footnote 7) confirming that the above recommendation remains pertinent today.

PR-2014-13: As long as the confidentiality problem will hamper the quality of the scientific assessment efforts CCSBT should continue to improve the accessibility of "confidential" data for this purpose, with appropriate safeguards. A time limit should be adopted in the data confidentiality rules, putting most if not all data in the public domain after a given period of time sufficient to reduce sufficiently or eliminate any risk from its broader use.

SAWG-2010 RECOMMENDATIONS

The Scientific Advice WG (SAWG, Barcelona 2010) made a series of recommendations to improve data collection and sharing across tRFMOs. Our opinion/understanding on the present level of implementation of these recommendations is given at the end of each recommendation

- *Routinely collect data by year on catch, effort and sizes.* The recommendation is being implemented. It has become part of normal practice;
- *Give top priority to the timely provision of good quality data, following mandatory data requirements.* The recommendation is being implemented. It has become part of normal practice;.
- *Reduce lags in fishery data submission, making a full use of communication technologies (e.g. web-based).* Some data (usually large data sets) are submitted through the web;
- *Harmonize basic data formats.* There is already a fair level of harmonization on data types, levels of aggregation, geolocalization, etc.;

[22] Referred to in CCSBT 19 (2012), Attachment 11 and in ERSWG 10 (, 2013), Item 5)

- *Make the basic data used in stock assessment (catch, effort and sizes by flag and time/area strata) available via the websites or other means.* The release of such detailed stock assessment data in the public domain is not allowed by the CCSBT confidential data policy;
- *Make the fine scale operational data available in a timely manner to support stock assessment work.* This is a sensitive issue already addressed in SA-2008-8;
- *Address confidentiality concerns through rules and procedures for access protection and data security*. This recommendation is implemented through the 2010 Rules and Procedures for the Protection, Access to, and Dissemination of Data.
- *Ensure adequate sampling for catch, effort and size composition across all fleets and especially distant water longliners for which this information is becoming limited.*
- *Cooperate with other RFMOs 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.*
- *Routinely validate the information reported by Parties and estimate catches from non-reporting fleets using alternative [fishery-independent] sources of data, notably observer and cannery data*.

  Regarding information reported by its Parties, the CCSBT relies principally on its members for such verifications (e.g. Market surveys by Japan, farmed tuna by Australia) and verification of data in accordance with CCSBT's High-Level Code of practice for Scientific Data Verification[23]. The Secretariat does not receive sufficiently detailed catch and effort or scientific observer data from Members to conduct verification between these data sets. However, the Secretariat does examine and report[24] on discrepancies between total reported catches, monthly catch reports and CDS catch estimates. The Secretariat also reports on any incoherence in data submitted by Members to the Party concerned. The CCSBT has put in place Quality Assurance Reviews (QARs) which allow verification on the quality of the systems used at national level for data collection and compliance assessment, by the Compliance Committee.

  Regarding unreported catches, no information was found by the PR regarding specifically the assessment of landings by non-reporting fleets. CCSBT has made all necessary efforts to call the relevant States and entities to join the Extended Commission and it is believed that the vast majority of SBT catches are being reported to it. A significant unknown is China. Some problems remain, also, with some member's fleets such as with recreational catches (in Australia) and artisanal catches (in Indonesia)

The work conducted since the SA-2008 has been impressive and it is a pity that the historical data series could not be reconstructed with a sufficient level of confidence. The data crisis created by the discovery of historical misreporting has stimulated the healthy

[23] Agreed at CCSBT 17 and adopted at CCSBT 19. Accessible at http://www.ccsbt.org/userfiles/file/docs_english/operational_resolutions/HighLevel_CodeofPractice_DataVerification.pdf

[24] See for example the document CCSBT-CC/1310/04 (Rev2) on Compliance with CCSBT management measures.

development of improved data collection standards and practices. This is a never ending responsibility.

PR-2014-14: It is recommended that the SAWG recommendations be carefully examined and integrated in the data collection and sharing agenda.

4.1.3 Quality and provision of scientific advice

Kobe criteria

The extent to which the CCSBT:

a) Receives and/or produces the best scientific advice relevant to the fish stocks and other living marine resources under its purview, as well as to the effects of fishing on the marine environment (KI)

b) Developed methods to quantify uncertainty and reflect it in risk assessment (KIII. p4; KIII Annex 3,1.2) and clearly articulates risk and uncertainty in the scientific advice it uses for decision-makers (KII.1.e);

c) Contributed to the Creation and function of the joint Technical WG on Management Strategy Evaluation (KIII, Annex 3, 1.3)

SA-2008-9: BALANCING SBT AND ERS SCIENTIFIC WORK

Achieve a better balance between the scientific efforts dedicated to SBT on the one hand and ERS on the other.

Since it formalization in 1994, the scientific process used in the CCSBT has continuously improved as experience was acquired, more members participated, crises emerged and were resolved (e.g. misreporting, experimental fishing, etc.) and scientific infrastructures were created. The combination of standardized SBT stock assessment procedures (keeping open alternative ones) with the use of management procedure taking due account of the specific uncertainty in the SBT context is very appropriate (and the effectiveness of that combination needs to be regularly assessed, e.g. using retrospective analysis). The intervention of an Independent Panel and Independent Chairs ensures peer review and external oversight to a level rarely met in fishery bodies. The regular participation of Independent Panel members at the SC and OMMP facilitate consensus and consideration of views expressed in SAG/SC reports.

A number of important international instruments including UNCLOS and UNFSA call for a broadening of RFMOs TORs to cover also the sustainability of the *associated and dependent species,* e.g. within an ecosystem approach. The CCSBT established its ERS Working Group (ERSWG) from the onset, in 1994. Since then some progress has been made by CCSBT and in collaboration with other RFMOs, to improve the attention given to impact and conservation of ERS (particularly from a by-catch reduction angle). In 2011, CCSBT was in the process of updating its shark and sea bird identification guides. At present, most of the assessment work is done at national level and results are shared. Joint assessments are still to come. Progress has been slow and the state of the species concerned remains uncertain despite the fact that some of them are red-listed by IUCN.

This is a difficult recommendation to evaluate as there is no definition of an acceptable or good "balance" between the respective efforts. Just as "equity", the notion of "balance" is very context sensitive and depends on the point of view. However, a "better" balance can be achieved with more attention being demonstrated through assessment, first, and then through management. The work undertaken, and the results obtained with seabirds could be an example to replicate on other key species. The efforts being made on sharks are in the right direction.

In 2012, the CCSBT 19 agreed that its ERSWG contact other tRFMOs to promote global work on assessment of fishing impacts of tuna fishing on seabirds and Porbeagle sharks. The responses received were mixed. A strong suggestion was that the priority be put instead on assessing the effectiveness of new tRFMO seabird conservation measures.

In retrospect, the assessment and advisory effort has been less developed for ERS than for SBT. This is logical to some extent considering the central SBT mandate but some rebalancing may become necessary at some point to avoid damaging the reputation of the CCSBT or worse, some trade-related sanctions. At present, most of the ERS policy relies on unilateral measures taken by Members with minimal collaboration and there has been no overall coordination of performance assessment. In addition, SBT vessels are required to comply with other tRFMOs measures on ERS when operating in their waters. Some CCSBT Members have argued that that the CCSBT should also adopt its own measures (CCSBT 19, 2012). This has not been agreed and the draft resolution "To mitigate Impact on ERS" confirms the present status quo.

Binding conservation and management measures of IOTC, ICCAT and WCPFC are binding on CCSBT members that are Parties/Cooperating Parties to those Conventions if they are fishing for SBT in those Convention Areas. In practice, this binds all CCSBT Members/CNMs to those measures except for Taiwan in the Indian Ocean (which is nevertheless cooperating with IOTC's measures). Given that CCSBT relies on the IOTC for many of its ERS and MCS measures, this situation seems to be another reason for the CCSBT to adopt its own measures or to ensure that by referencing the measures of the other RFMOs, including IOTC, in its binding resolutions, all its members, including Taiwan would in fact be legally bound to them through their membership of the EC in the CCSBT.

The Secretariat recognized (e.g. at the 1st JTBWG, 2011), that a lack of data on ERS bycatch and of a central database limited the analysis that the CCSBT could conduct on such species. Assessments on ERS (e.g. turtles, birds, sharks) are made directly by CCSBT members (no joint assessment). CCSBT also relies on assessments of ERS by specially mandated institutions such as ACAP (for albatrosses and petrels) or Birdlife International for other seabirds and TRAFFIC for sharks. The ERSWG focuses mainly on longline fishery as there is no purse-seine fishing on FADs. The longline is deemed interacts little with mammals and turtles (but data for Indonesian fisheries are lacking). The focus of by-catch mitigation has been primarily on sea birds and sharks.

There have been recommendations to update the CCSBT Convention to allow formally for a better focus on ERS (cf. recommendations SA2008-15 to SA-2008-17).

PR-2014-15: The above recommendation is important and is probably a long-term one with implications for research but also for management. However, because of the subjectivity of the concept of balance and its potential financial implications, it

should be used as a "chapeau" and be complemented by more specific ones, related to specific species/areas requiring more attention.

SA-2008-10: SCIENCE OVERSIGHT: ESC AND INDEPENDENT PANEL

> *The current structure of the Extended Scientific Committee, especially, the independent chairs and advisory panel, should be maintained.*

The present situation corresponds to that recommendation. The matter has been reviewed by the ESC and EC. The 2012 and 2013 ESC meetings -not requiring a full stock assessment- were conducted with a reduced panel (three members instead of four). The 2014 ESC meeting will be conducting a full stock assessment and involve the complete panel of four members.

PR-2014-16: No additional recommendation is needed regarding the continuing role of the ESC Independent Chair and Panel

SA-2008-11: SCIENTIFIC SKILLS REQUIRED

> *In light of the requirement to focus on future information with which to assess the stock status of SBT, the number and skill sets of independent experts required in support of the scientific process should be reviewed.*

Our assumption is that this recommendation refers to the need to have access to scientists with expertise in areas such as complex ecosystem modelling, uncertainty, foresight methodologies, and Bayesian approaches. While our knowledge of the inner structure of the scientific groups is elementary, it seems that the development process of the Management Procedure in the last few years has required already the intervention of such scientific skills which must therefore have been acquired or are growing. What might be missing is the developing of these skills in less endowed countries, to promote consensus.

PR-2014-17: Assess the eventual gaps in scientific skills and proceed to fill them through recruitment (including of new/complementary profiles in the Independent Panel) and capacity building in partner countries.

SA-2008-12: MANAGEMENT PROCEDURE

> *The need for a management procedure for the fishery in the short term should be reconsidered in light of the alternative approach of periodic stock assessments using the agreed operating model*.

The Principle of using a "Management Procedure" to assist in fixing the TAC was agreed in 2000. Its development started in 2002. A first candidate procedure was proposed in 2005 to the EC. After further work in 2006-2010, the MP was first implemented for the 2011 TAC.

The Operating Model which evolves with new knowledge is used to conduct a full stock assessment every 3 years The MP is used unless special conditions emerge that may invalidate its application in a particular year or group of years (application of the Metarule). A performance assessment is also foreseen every 6 years to check whether the (MP + metarule) process are guiding the decisions in the right direction, obtaining the right outcomes.

PR-2014-18: The original recommendation should be considered as superseded. No new recommendation needed as the MP is now integrated in the assessment and advisory tool box of the Commission and its performance will be regularly assessed.

KOBE III-1: MANAGEMENT STRATEGY EVALUATION (MSE)

> *Contribute to a Joint Technical WG on Management Strategy Evaluation (MSE) to facilitate the implementation the PA (Kobe III p.4 and Annex 3 § 1.3)*

This is a recent recommendation from Kobe III referring to cooperation with other tuna RFMOs on Management Strategy Evaluation processes as a specific contribution to improve the application of the precautionary approach to decision making. MSE is increasingly being used to evaluate the impact of the main sources of uncertainty inherent in the system being managed. The work undertaken in the CCSBT to develop a Management Procedure has de facto involved Management Strategy Evaluation to generate and chose an MP among the various possible candidate MPs. The JTWGMSE has been established, led by ICCAT and the CCSBT is a member of it. The ongoing joint work includes: (i) A review of the Kobe Advice framework; (ii) MSE tools; and (iii) Use of parallel and cloud computing.

This very strategic initiative is going on and will certainly continue for some time, being progressively incorporated in best practices for precautionary tuna fisheries management.

PR-2014-19: The CCSBT should continue to contribute to tuna RFMOs effort to develop MSE capacity and implementation. As the Joint WG now exists, more specific recommendations might be more useful in the future.

SAWG-2010 RECOMMENDATIONS

The Kobe II working group on scientific advice (SAWG-2010) has made a number of recommendations of relevance to this section, aiming at further improving the scientific advice provided to tRFMOs.

> *Regular large scale tagging programs (including archival tagging) to estimate natural mortality growth and movement patterns as well as tuna behavior and vulnerability.*

A special budget of around $0.6 million per year was operated between 2002 and 2006 to finance a SBT conventional tagging program as part of the CCSBT's Scientific Research Program. Similar core budget resources do not exist anymore in the CCSBT budget which has only small amounts for tags retrievers and coordination of the tagging experiments. The latter are now conducted by CCSBT Members directly and results are shared through the ESC. The regular reference to tagging in the ESC reports indicates that this activity is given regular attention by developed Members. Some parts of the programme are funded by the CCSBT budget (e.g. the tag recovery programme and tagging programme coordination). However, the PR does not have a precise assessment of the amount of tagging undertaken compared to the needs or of the relative priority to be given to conventional versus archival or genetic tagging..

PR-2014-20: Large scale tagging programmes do not seem to be undertaken anymore which means that the recommendation above is not fulfilled. It should be maintained or formally rejected by the ESC with an explicit rationale..

The study of spatial aspects of stock assessment to substantiate spatial management measures.

The CCSBT has presently adopted a time-structured (historical) assessment model, giving priority to the analysis of time strends in the separate SBT fisheries and age structures. In that approach, space (e.g. fishing areas) is explicit in data collection (CPUE, aerial surveys, tagging). It is also ecologically relevant (e.g. corresponding to main spawning or recruitment areas). However, the emphasis is put on the construction of a total resource trend in biomass, recruitment and age-structure, in line with most conventional fishery resources and fisheries assessments. The management measures in place are not spatially differentiated. The recommendation makes sense in that the spatial distribution of effort and catches in space is directly relevant to the impact on the resource and on revenues (hence on incentives). It is also relevant in that the present management measures do induce changes in distribution of the fishing activity[25]. Scientists have to continuously attempt to detect relevant changes in distribution of the fishing activity and the stock to correct for impacts on the indices used in the MP. A spatially-structured assessment and management framework would probably be more realistic but we have not seen any analysis of the pros and cons as well as costs and benefits of that potential strategic shift in the CCSBT area. The Global Spatial Dynamics Project (and archival tagging programme) is very relevant in that context.

PR-2014-21: Efforts to gain information on the spatial structure and movements of the SBT stock and the fleets exploiting it should be continued as they are of paramount importance for management and conservation.

PR-2014-22: A spatial, ecosystem-based framework could be developed as a strategic layer of assessment, added to the presently more tactical framework (imposed by the knowledge available as well as the need to deliver an undifferentiated TAC estimate), to be used every 5-10 years, perhaps in connection (not in synchrony) with the MP 6-yearly performance assessment, for obtaining a more realistic foresight.

The use of high-resolution spatial ecosystem models to better integrate biological features of tuna stocks and their environment. (SAWG-2010)

The issue does not appear to have been debated in the ESC. This evolution might indeed be useful to better understand the medium- to long-term natural oscillations of the SBT, presently not accounted for in the assessments and projections. Such an approach (the difficulties of which should not be underestimated) would also allow the development of an improved foresight on future climate change impacts. The size of the problem and its general relevance would perhaps justify a cross-tRFMOs programme.

Agree on a list of minimum standards for stock assessment

[25] As evidenced for example in paragraph 85 of the 2010 Scientific Committee report.

The different RFMOs use different assessment methods, with different degrees of complexity, and using different data types. Some are spatially structured while others are based on time series analyses. The SAWG noted that because of the different situations it was improbable that RFMOs would succeed or even need to use the same methodology. However, they could agree on minimum standards for reliable stock assessment, e.g. explicitly addressing explicitly uncertainty (e.g.in data and models); institutionalizing external peer review; and generalizing the use of Management Strategy Evaluation (of some form).

The PR does not have information on progress made among tRFMOs to implement that recommendation. However, the CCSBT's assessment methods are probably among the most complete and advanced and it collaborating with other tRFMOs in the joint WGs on MSE and on ERS (bycatch) and though the Kobe process. This should provide opportunities to develop such standards more formally.

PR-2014-23: The recommendation is apparently being implemented across various activities. It should probably be maintained until a formal document is agreed and published on minimal stock assessment standards.

Develop research capacity in developing Members' countries

This recommendation echoes the provisions of the UNFSA (Article 14.3) and is a standard in all international agreements involving developing countries. The response to this recommendation tends to be developed bilaterally as the CCSBT has little or no funds for such purpose. However, the CCSBT has undertaken training on the Management Procedure in Indonesia.

PR-2014-24: This subject is important for the future of the CCSBT decision-making progress and legitimacy and should be elevated to a continuing recommendation. The direct role of CCSBT might be limited (by its funding and own capacity to train) but it could help identify needs, promote assistance and monitor capacity-building activities directly related to the fulfilment of its mandate.

BYCATCH POLICY AND MANAGEMENT STRATEGY

The very important issue has been raised in the SA-2008 report but no recommendation has been formulated yet on the possible (and necessary) development, by CCSBT of a proper policy and management strategy in relation to ERS.

More work is needed in the future on bycatch policy and management. The comprehensive analysis by Gilman et al (2012) have assessed CCSBT's overall performance in that regard at 24%, of the performance of the best RFMO for that criteria (CCAMLR) indicating room for improvement. The main problem seems to be with the pelagic longline SBT fishery and its incidental catch of seabirds (primarily albatrosses and large petrels), sharks, sea turtles, and small swordfish. Bycatch off cetaceans has not been shown to be problem and there seems to be little or no bycatch the Australian purse-seine fishery. According to Gilman et al. (2012) there is no data in the CCSBT data accessible on the web on the non-SBT catches in the SBT fishery but the problems does not seem to have been raised by the partner RFMOs (mainly IOTC and ICCAT). Information on species-level by catch (assuming it exists at national level) is also not accessible on the CCSBT website.

Compliance with the binding Tori Line measure (and other complementary regulations) is also not known. The CCSBT has developed specific performance standards for seabird mitigation measures in long-line fisheries[26] but the language used is still very moderate as the document calls on Members to "*promote*", to "*make every effort*…," and to "*encourage adoption of*", etc. This is a first step but more decisive decisions will probably be needed in a not too distant future.

Presently, the CCSBT relies on national data collection, assessment and reporting on implementation and those reports are not public. They are not visible on the CCSBT website and it is not clear that they will be shared if formally requested. The CCSBT scientific observer program is nascent. Only 10% of coverage is required and that low target is not being met by all members.

Moreover, no data is available on the national observer data collection protocols regarding for example (minimum % to record at species level; % for which length data is required; % of animals that are dead, or alive, when discarded. The CCSBT works towards strengthening its observer programme but, until the draft modification to the program is finalized and implemented[27], it does not appear that observer would be authorized to report on use of ERS bycatch mitigation mechanisms.

PR-2014-25: It is recommended to bring together all the elements presently related to ERS to elaborate a proper policy and management strategy for ERS, adopting clear objectives as well as reference values or trends, limits and targets, against which performance could be assessed. Better use of observers would improve the efficiency of the policy.

4.1.4 Adoption of conservation and management measures

Kobe criteria

The extent to which the CCSBT has:

a) Adopted conservation and management measures for both target stocks and non-target species that ensures the long-term sustainability of such stocks and species and are based on the best scientific evidence available (KI.I.4);

b) Applied the precautionary approach as set forth in UNFSA Article 6 and the Code of Conduct for Responsible Fisheries Article 7.5, including the application of precautionary reference points (KI.I.4; KI.I.10);

c) Applied the Ecosystem Approach to Fisheries to manage bycatch of target and non-target species (KI.I.4; KI.I.10);

d) Minimized the impact of fishing on HMSs and ERSs (particularly turtles, seabirds and sharks) (KI.I.10; KI.I.11). Has assessed and managed sharks (KI.I.11; KII.1f; KIII.5.b.d).

[26] See http://www.ccsbt.org/userfiles/file/docs_english/operational_resolutions/CPG1_Minimum_Standards.pdf on page 41.

[27] The draft will be considered by the ESC this year (cf. Attachment 6 to the ERSWG 10 Report and paragraphs 84-85 of the CC8 report which supported the draft.

e) *Adopted and is implementing effective rebuilding plans for depleted or overfished stocks (KI.I.4);*

f) *Moved toward the adoption of conservation and management measures for previously unregulated fisheries, including new and exploratory fisheries (KI); Not applicable*

g) *Taken due account of the need to conserve marine biological diversity and minimize harmful impacts of fisheries on living marine resources and marine ecosystems.*

h) *Adopted measures to minimize pollution, waste, discards, catch by lost or abandoned gear, catch of non-target species, both fish and non-fish species, and impacts on associated or dependent species, in particular endangered species, through measures including, to the extent practicable, the development and use of selective, environmentally safe and cost-effective fishing gear and techniques (KI).*

i) *Required the use of on-board observers to collect discards data (KIII.5.b.a);*

j) *Increased attention on seabirds, turtles and mammals (KIII.5.b.f);*

k) *Undertaken R&D work to reduce by-catch of juveniles tuna (FADs) (KI.I.12);*

l) *Considered bycatch by recreational fisheries (KIII.b.e):*

The fact that the set of Kobe criteria for this area of CCSBT responsibility is particularly long and demanding should not be surprising considering that conservation and management are the core business of the Commission and that pressure is growing to increase attention to the collateral impact of the fishery. The list of criteria used in the SA-2008 report has been completed with some elements available in the Kobe I report but not previously mentioned (points d, e and i) as well as elements emerging from Kobe II and Kobe III (points c, j, k, and m).

SA-2008-13: SCIENTIFIC FOUNDATIONS OF MANAGEMENT MEASURES

The CCSBT should continue to make conservation and management measures which are consistent with scientific advice from the Extended Scientific Committee.

This important advice is now in-built into the ordinary practice of CCSBT decision-making, through the ESC and specific working groups as well through the formal use of the Management Procedure and its meta rule. The Strategic Plan, the Compliance Plan and the Performance review are now in place to plan the action needed and check performance.

The scientific foundations of CCSBT's decisions can be appreciated through two complementary sets of considerations: (1) the work undertaken by the Commission to improve the quality of the science it has at disposal for decision-making (cf. **Section** on **Quality and provision of scientific advice**); and (2) the extent to which the Commissions follows/adjusts the advice received.

In that respect, the SA-2008 report indicated that, according to the ESC Chair, *the decisions made by CCSBT in 2006 and 2007 largely follow the recommendations of the ESC in those two years.* In order to check this for 2008-2013, the PR Panel asked

specifically the CCSBT Secretariat for the response of the EC to the ESC recommendations listed in the SA-2008 marked-up report. The related information, compiled in **ANNEX** 3 – EC response to the ESC recommendations since 2008, indicate that all the ESC recommendations have been followed up to some extent, either in the same year (for one-off decisions) as well as in following years, when the response required longer or continuing efforts.

PR-2014-26: As a consequence, the recommendation above, in its present form, could be considered as being implemented correctly. As it seems to have been incorporated in the ordinary practice of the EC, it might be eliminated from the list and replaced, as appropriate with more specific ones in the future.

SA-2008-14: MEETING UNFSA STANDARDS

The CCSBT should satisfy the UNFSA standards

This recommendation is justified because the CCSBT was established shortly before the UNFSA. Two complementary solutions are indeed proposed by the SA-2008 (section 4.5.3): (1) to revise the CCSBT Convention to align it with the UNFSA provisions; and (2) to develop a Strategic Plan and a Management Plan complying with the UNFSA requirements.

The two solutions could also be considered as alternatives or successive steps. The second solution would allow the CCSBT to comply with the UNFSA requirements without going into the difficult process of revising its mandate. Further, it could be seen as an interim solution as the potential issues related to a modification of the Convention might be ironed out.

The CCSBT appears to have chosen the second option. Since 2008, it has organised its work using the Kobe criteria which tightly match the UNFSA management criteria. Consequently, when the CCSBT performance is assessed against the Kobe combined criteria, it is assessed *de facto* against the UNFSA criteria.

PR-2014-27: This recommendation refers to an international legal obligation. It could be maintained but cannot be usefully assessed unless it is made more specific (see next recommendation). New recommendations could, for example, call for explicit implementation of instruments that further the implementation of UNCLOS and UNFSA such as International Guidelines and Action Plans for management of fishing capacity, control of IUU, management of sharks, etc… or the CBD and WSSD requirements for Marine Protected Areas (e.g. to protect SBT spawners and juveniles or ERS) and other international agreements. It could also call for binding measures for CCSBT ERS conservation and management.

SA-2008-15: MODERNIZE THE CONVENTION TO UNFSA STANDARDS

The parties to the Convention could review the Convention and modernise it to UNFSA standards.

This recommendation refers to the heavier of the two propositions contained in the preceding recommendation to meet UNFSA standards**.** Even though, as stated above, the work of CCSBT is fairly well aligned already on the UNFSA provisions

through meeting the Kobe Combined Criteria, a formal examination of the Convention for filling any gap in it might still be advisable to avoid criticism.

PR-2014-28: The CCSBT should formally consider the need to align its Convention to the UNFSA principles and standards. A gap analysis could be an easy first step based on which a decision to proceed with a formal revision or through Strategic and management planning could be explicitly made.

SA-2008-16: DEVELOP A STRATEGIC AND A SBT MANAGEMENT PLAN

The CCSBT should develop a Strategic Plan plus a Management Plan to implement minimum standards for the fishery (SA-2008).

This recommendation refers to the "lighter" of the two propositions contained in the preceding recommendation to meet UNFSA standards. It may be seen as a complement to the preceding or as an easier way to comply with the UNFSA standards than a full-fledged revision of the Convention. In our view, that recommendation stands whether or not the Convention is revised as these plans will give practical and coherent effect to the legal text. The CCSBT formally adopted a Strategic Plan (in draft in 2010 and in final in 2011) and according to the Secretariat, the Plan is being implemented since 2010 in accordance with the specified timeframes. No management Plan has been formally adopted yet.

A proper management plan should cover the entire decision-making, implementation and evaluation cycle and contain: (i) objectives; (ii) approaches (participative, precautionary, ecosystem); (iii) data requirements; (iv) assessment methodology; (v) Management Procedure; (vi) adopted measures; (vii) implementation procedures means and responsibilities; (viii) control and surveillance; (ix) penalties, judicial process and appeal mechanisms; (x) monitoring system; and (xii) management performance assessment. The Management Plan would show in a transparent manner the way in which the Members intend to implement the obligations under the Convention. It should clarify the role of the Commission, the Secretariat, the Members as well as the means needed, at national and Secretariat levels.

The work of the CCSBT reflects decisions covering most of these points. The management goals and the strategies to reach them (e.g. through TACs) are in the Strategic Plan. The Management Procedure encapsulates an objective decision function. The TACs and national allocations are fixed. There is a compliance plan and Quality Assurance Reviews (QARs)[28] are required. The Performance Review process provides internal and external oversight. Altogether, this indicates that the CCSBT has all the elements needed to develop a Management Plan. The comparison with the Management Plan requirements, above, point to some gaps such as the ecosystem approach, the means and allocation of responsibilities, the penalties and appeal processes, etc. which may be dealt with in the Convention but could be more transparently integrated in a management plan.

PR-2014-29: The CCSBT should pursue the effort of coherent planning. As conservation and management are the core of the CCSBT mandate and the Strategic

[28] The purpose of the Quality Assurance Reviews (QARs) is to provide independent reviews of Members management system to help them identify how well they function with respect to their CCSBT obligations and to provide recommendations on areas where improvement is needed (CCSBT 20, Attachment 10).

Plan provides a comprehensive framework for fulfilling that mandate, it could be suggested to attach to the recently adopted Strategic Plan (as an annex) a management Plan, going into more implementation details. This could help avoid duplication and integrate better the policy, the strategy and the management plan. The management procedure and metarule processes are part of the Management Plan.

SA-2008-17: DETERMINATION OF NATIONAL ALLOCATIONS

Consider moving to alternative allocation principles of the TAC rather than set tonnages.

The allocation decisions made from the start of the 2010 fishing year and the 2011 Resolution on the Allocation of the Global Total Allowable Catch, base the allocations of the TACs on proportions of their pre-determined "nominal catches" (a sort of negotiated historical rights foundation). Allocations to new entrants (as in the case of the accession by South Africa) are to be apportioned to all members' allocation based on their previous allocations.

A related issue is that of quota trading between members and CNMs. The need to develop a framework for such post-allocation trading is foreseen in the Strategic Plan but had not yet been yet been considered by the EC at CCSBT 20.

The procedure used to decide on the allocation for new entrants is not clear and do not seem to have been "standardized". It seems to be more related to catches immediately before entering into the Agreement, as modified by informal discussions and negotiations (of which there is no formal record), than to historical catches prior to 1994. It may be surprising, considering the efforts made by CCSBT to accommodate as much as possible all fishing parties under the extended agreement, that no formula has been formally adopted to calculate such allocations in a transparent manner but this might be understandable considering the level of uncertainty of historical catches.

PR-2014-30: The present practice fulfills the recommendation. As long as members and candidate members find the present approach convenient, there is no reason to change it.

KOBE-1: ECOLOGICALLY RELATED SPECIES

Going from generic to specific items, we consider below a number of ERS-related potential recommendations not yet formulated in the SA-2008 or PR-2008 reports despite the fact that they stem directly from the Kobe Criteria referred to at the beginning of this section as well as from UNCLOS and UNFSA (Article 5b) obligations regarding conservation of dependent and associated species. The recommendation could be expressed as follows:

Strengthen conservation and management measures to minimize harmful impacts of SBT fisheries on non-target populations and their ecosystems and ensure long-term sustainability, using the best scientific evidence available. In particular:

Increase attention on sharks, seabirds, turtles and mammals (KIII.5.b.f), minimizing the impact of fishing (KI.I.10; KI.I.11). Assess and manage sharks

(KI.I.11; KII.1f; KIII.5.b.d).

Require the use of on-board observers to collect discards data (KIII.5.b.a);

The minimum performance standards for the implementation of the CCSBT Scientific Observer Programme Standards (SOPS) refer essentially to the collection of SBT data. They do not pay much attention to ERS and the performance criteria do not refer to ERS data collection or the need to collect bycatch[29] or discard data[30]. The only mention in in the Standards is in item 10.D and the Attachment 1 which refer to SBT *and all other species caught, to the extent possible,* referring, in Attachment 1, to *all fish, birds, turtles etc.* A specific requirement, not specifically connected to the observers programme, exists also in relation seabirds bycatch mitigation in longline fisheries including the use of Tori lines) for which it is stipulated that: *Members should: (i) Continue existing information collection on the nature and extent of ERS captures in southern bluefin tuna fishing operations; and (ii) Collect data concerning the incidental catch of seabirds and information concerning the state and trend of the seabird population subjected to incidental catch in cooperation with appropriate international organisations, other States and entities concerned.* The SOPS Annex 1 to Attachment 1 indicates clearly that "*all other species*" have the lowest priority in the work of the observers.

Similar (soft) specifications are found in the Compliance Policy Guideline 1 stipulating the *Minimum performance requirements to meet CCSBT obligations* (revised at CC8, 2013) offering limited scope to really check compliance. In its Appendix 1, section 5, the minimum performance requirements in relation to seabirds mitigation in long-line fisheries and, more generally, to ERS -which *Members are expected to comply* is *to encourage adoption of methods to mitigate incidental catch.* It calls on countries to implement *to the extent possible,* the FAO IPOAs and Guidelines and to comply with measures on seabirds, turtles and sharks applying in the convention area of IOTC, WCPFC and ICCAT as appropriate, when fishing in these areas, and to report data to the EC and ERSWG. IN the same document, section 6, the performance requirements for reporting do not mention ERS data. According to compliance reports (e.g. CCSBT- CC/1310/04) practically all members of CCSBT declare to be complying with these soft requirements. However, in the same document, only one member has duly provided all of the information requested in 2013.

The minimum requirements are not very demanding and the process by which the effectiveness of that members' implementation is assessed is not clear to us. Nonetheless, the adoption of the Effectiveness of Seabird Mitigation Measures Technical Group by CCSBT 20 (in 2013) to measure and monitor the effectiveness of these measures in SBT longline fisheries should lead to a better definition of needs and hopefully to an improvement of the situation for seabirds.

PR-2014-31: There is obviously a trade-off in the use of the observers' time which affects the precision of the data (and ensuing assessments) of SBT and ERS respectively. Although the detailed data collected eventually by observers is not known, a minimal assessment of the state of the ERS (or contribution to such assessment in a collaborative framework) will probably require more ERS data to be collected*. *The use of video cameras might be a useful assistance to the observer.

[29] The only bycatch referred to is that of SBT

[30] http://www.ccsbt.org/userfiles/file/docs_english/operational_resolutions/CPG1_Minimum_Standards.pdf

Ensure that [management] measures reflect international agreements, tools and guidelines to reduce bycatch, including the relevant provisions of the FAO Code of Conduct, the IPOAs for Seabirds and Sharks and the FAO guidelines on sea turtles. (BCWG 2010).

This recommendation of the 2010 BCWG complements the preceding recommendations on ERS. The CCSBT is well aware of the need and utility of implementing the FAO Guidance as contained, for example in the International Plan of Action for Reducing Incidental Catches of Seabirds in Longline Fisheries (IPOA-Seabirds), in the International Plan of Action for the Conservation and Management of Sharks (IPOA-Sharks), and the FAO Guidelines to reduce sea turtle mortality in fishing operations (FAO-Sea turtles). Their implementation requires the elaboration of Regional Plans of Implementation (RPOIs) and National Plans (NPOIs).

As stated above, the *Minimum performance requirements to meet CCSBT obligations (revised at CC8, 2013,* Appendix 1.5) calls on countries, *inter alia* to implement the FAO IPOAs and according to compliance reports (e.g. CCSBT- CC/1310/04) all but one CCSBT members declare to be complying with this requirement.

PR-2014-32: The CCSBT relies on its members to comply with non-CCSBT institutions requirements and the degree of control or verification by CCSBT of the effectiveness is not clear and possibly insufficient. Formally adopting the relevant FAO IPOAs, adapting them to regional plans of Action (RPOAs), and instituting an implementation framework would be an efficient way to align CCSBT management practices with the international standards while strengthening the purely voluntary FAO instruments.

Undertake R&D work to reduce by-catch of juvenile tuna (KI.I.12);

This recommendation is probably aimed at tuna fisheries operating on Fish Aggregating Devices (FADs) and may not be very relevant for CCSBT, although it has fisheries targeting juveniles for aquaculture purpose.

Consider bycatch by recreational fisheries (KIII.b.e)

The recreational fisheries of some CCSBT members (e.g. Australia) catch some SBT and it is not clear to us whether they do so as target, bycatch of both. Efforts to collect the related information are recent. Australia has still to report any catch as the responsibility for data collection rests on the individual States and there is no regular process. A commonwealth-wide process is being studied. New Zealand has started reporting small and decreasing quantities. Whether estimations are included in the stock assessments is not clear to us but the amounts involved, while adding to uncertainty, do not seem to be able to bias them significantly. A debate has started as to the inclusion of the recreational fisheries catch into the national quota.

The full stock assessment being planned by the ESC for 2014 is supposed to examine the impact of unaccounted catch mortality including that of the recreational fisheries (CCSBT 20 report, 2013).

Minimize waste, unwanted bycatch, discards, catch by lost or abandoned gear, of ERS, in particular endangered species, including, to the extent practicable, the development and use of selective, environmentally safe and cost-effective fishing gear and techniques (KI).

Past action indicates that the CCSBT has *de facto* recognized its responsibility towards ERS and started to give effect to it through: (i) Early adoption of the Tori lines and complementary measures to reduce seabirds by-catch; (ii) The recommendation (e.g. in the CCSBT 15 in 2008) that Members and CNMs comply with all current binding and recommendatory measures aimed at the protection of ERS -including seabirds, sea turtles and sharks- adopted at IOTC, WCPFC, and, more recently, ICCAT, when fishing in their Convention area; and (iii) The decision to start assessing porbeagle sharks stocks, particularly important as this species is also targeted by some SBT fisheries.

The 2010 Brisbane WG on bycatch made a number of very relevant recommendations aiming at reducing the impact of the SBT fishery on ERS. The content of some of them has already been considered in the recommendations identified elsewhere in this report, e.g. on the precautionary and ecosystem approaches (cf. recommendations **PR-2008-2; PR-2008-4 and KOBE-2)**. Elements not considered yet include:

> *Adopt the following principles reflecting best practice: bycatch avoidance and mitigation measures should be: (1) binding, (2) clear and direct, (3) measureable, (4) science-based, (5) ecosystem-based, (6) ecologically efficient (reduces the mortality of bycatch), (7) practical and safe, (8) economically efficient, (9) holistic, (10) collaboratively developed with industry and stakeholders, and (11) fully implemented (BCWG 2010).*
>
> *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. (BCWG 2010).*
> - *Expedite action on reducing bycatch of threatened and endangered species. Prohibit capture of depleted and threatened species or require their retention on board where alternative effective sustainability measures are not in place (BCWG 2010).*
>
> *Evaluate the effectiveness of current bycatch mitigation measures, and their impact on target species catch and management:*
>
> - *Identify priorities for action and gaps in implementation, including in enforcement and capacity-building (BCWG 2010).*
> - *Identify research priorities and pilot projects to further develop and evaluate the effectiveness of current or proposed measures, working with fishers, fishing industry, IGOs and NGOs, universities and others as appropriate (BCWG 2010).*
> - *Facilitate the elaboration of a full compendium of information regarding mitigation techniques or tools currently in use, e.g. building on the WCPFC Bycatch Mitigation Information System (BCWG 2010).*

Efforts have been increasing but much work remains to be done, however to effectively exert the responsibility the Commission has in regard to ERS. The question is: how far can the CCSBT take binding measures for ERS and enforce them, without changing its Convention?

In a nutshell, the long list of recommendations above call for quality principles for bycatch management that could come close to those agreed for the target species (even though

reference points might differ) including scientific foundations, mandatory nature (bindingness) of regulations and alignment with international standards.

PR-2014-33: The real extent of the problem (if any) in relation of turtles and mammals should be transparently assessed by the ERSWG. The overall policy in relation to ERS, summarized in the Strategic Plan, provides the higher level frame for the ERS part of a future management plan

PR-2014-34: As mentioned in the PR-2008, the most effective way to reduce collateral impacts on ERS is through binding measures implemented by members and cooperating non-members and the duty to do so is established through the commitments made by governments in other fora to use the CCSBT and other RFMOs for just such purposes. The commitments are referred to also in the Kobe criteria a, h, and i.

PR-2008-4: APPLICATION OF THE PRECAUTIONARY APPROACH

> *Apply the precautionary approach as set forth in UNFSA Article 6 and the Code of Conduct for Responsible Fisheries Article 7.5, including the application of precautionary reference points (PR-2008; Kobe I, § I.I.4 and 1.10).*

This recommendation stems directly from the Kobe criteria (b) above. It was not specifically mentioned in the SA-2008 but was referred to in the PR-2008. The application of the PA, referred to in the 1992 UNCED Declaration, the 1995 UNFSA (Articles 5c and 6) and the CCRF (Article 7.5) and has already been considered (**cf. SA-2008-2**). It is implemented by CCSBT through the use of the Management Procedure which has been optimized in relation to many data and process sources of uncertainty.

PR-2014-35: This generic recommendation has very long-term implementation implications and could be considered as being implemented continuously as long as a precautionary MP is used together with the metarule. If formally adopted as a Principle (possibly inserted in a revised Convention), it would not need to be carried forward as a recommendation.

KOBE-2: THE ECOSYSTEM APPROACH

> *Apply the Ecosystem Approach to Fisheries to manage bycatch of target and non-target species (Kobe I, §I.4, §.I.10);*

This recommendation was not formulated yet but is clearly required to meet the Kobe criteria (d) above. As formulated, it is narrowly specified in terms of bycatch, a rather primitive vision of the approach. The Ecosystem Approach to Fisheries (EAF) as defined in FAO (2003) technical guidelines is a broader approach to development and management, based on using good governance principles and Ecological Risk Assessment (ERA) and management with strong social and economic underpinnings. It combines UNCLOS, UNFSA and UNCED requirements and guidance. Many of the elements underpinning the CCSBT action in relation to target stocks and ERS, including the precautionary approach, are elements of a non-formalized EAF. It would be useful to review the ongoing measures in reference to an EAF framework, to formally identify the EAF applications in CCSBT and identify eventual gaps. The opportunity to incorporate the EAF into the CCSBT

management framework explicitly is mentioned in the Commission's SWOT Analysis (in the Strategic Plan).

PR-2014-36: Consider the present elements of the CCSBT fishery policy and management framework which belong to an EAF. Identify possible gaps, discuss them, and move to fill them. Assess explicitly the compliance with the agreed EAF framework.

KOBE-3: REBUILDING PLANS

> *Adopt and implement effective rebuilding plans for depleted or overfished stocks (Kobe I § 1.4);*

While very pertinent in this section on adoption of management measures, this recommendation overlaps and largely duplicates Recommendation **PR-2008-3** on the CCSBT stock rebuilding strategy. As mentioned earlier, the Management Procedure is *de facto* a precautionary rebuilding strategy. The goals and the actions required to implement such a strategy are detailed in the Strategic Plan.

This important subject has been discussed since the very early stages of the establishment of the Commission (cf. CCSBT 1994, 1995a) with tensed discussion regarding the level of uncertainty and risk in the stock situation and precaution needed in the Management Strategy. The long-term objective of the rebuilding strategy is MSY, but MEY is also to be considered as the rebuilding reference point as part of the Strategic Plan. A mid-term (interim) management strategy was proposed as early as 1993 (CCSBT 1994a) explicitly aimed at stock rebuilding but never formally adopted. The interim objective proposed was *the restoration of the SBT stock to the 1980 level by the year 2020*. This objective is now considered unachievable and has been redefined as 20% of the unexploited spawning stock biomass by 2035. The original strategy rested on four main points: (1) the setting of a triennial quotas determined on the basis or rebuilding reference points; (2) Measures to discourage the capture of juveniles; and (3) the establishment of a decision making framework to adjust the TAC to unexpected (favourable or unfavourable) conditions. The present strategy is reflected in the Management Procedure which allows adjusting the TAC to changing conditions.

PR.2014-35: As it stands the original recommendation is largely completed with the adoption of a Management procedure and a Strategic Plan. However, the effectiveness of the rebuilding strategy and plans needs to be regularly checked for performance.

4.1.5 Capacity management

Kobe criteria
The extent to which the CCSBT has:
a) Identified fishing capacity levels commensurate with long-term sustainability and optimum utilization of relevant fisheries, allowing for legitimate development (Kobe I.I.3: Kobe II.1a);
b) Annually assessed capacity and its allocation (Kobe III, p.5-6);

c) Taken actions to prevent or eliminate excess fishing capacity and effort (Kobe I);

d) Considered the freezing of the large scale purse seine capacity of its developed Member States have and its reduced or transfer (Kobe III, p.6), paying attention to the problem of transfer between and within RFMOs (Kobe II.1b; Kobe III, p.6);

PR-2008-5: MANAGEMENT OF CAPACITY

The CCSBT should at very least implement the recommendations set forth in the FAO International Plan of Action on the management of fishing capacity.

The PR-2008 recommendation was somewhat at angle with the SA-2008 recommendation on the subject which did not recommend to CCSBT any action in terms of capacity management *other than for the Commission to take up with Indonesia the capacity for temporal and spatial closures in the SBT spawning ground.* The PR-2008 recommendation has been strengthened by the Kobe II WGs as follows:

Review existing capacity against the best available scientific advice on sustainable levels of catch and implement measures to address any overcapacity identified (TMWG-2010)

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 utilized and for a given resource condition." (TMWG-2010).

Consider implementing 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. (TMWG-2010)

Ensure a constant exchange of information on fishing capacity of fleets operating within their zones as well as the mechanisms to manage this capacity (TMWG-2010).

The CCSBT has explicitly preferred to base its management policy on allowable catch limits (TACs) than on direct capacity reduction, considering the latter "unnecessary". The experience in the Northern hemisphere and elsewhere since WWII is that, in the absence of explicit and concurrent adjustment of fishing capacity to the TACs, such catch limitations have not been able to avoid overfishing as overcapacity is a powerful incentive to increase TACs and limit their decrease when the resource conditions would require it. It is also a major source of IUU fishing. The issue was already raised by the PR-2008.

The first recommendation mixes two issues: (1) capacity reduction, for which the SA-2008 makes no recommendation and (2) space-time closures which are useful in protecting elements of the stock but do not reduce fishing capacity. This second part should really appear under **Section 4.1.4** on conservation and management measures.

The second recommendation made by PR-2008 and specified by the 2010 Tuna Management WG (TMWG) calls for implementation of the FAO IPOA-Capacity, pointing to

specific action. The FAO IPOA-Capacity requires that "*States should prevent overfishing and excess fishing capacity and should implement management measures to ensure that fishing efforts is commensurate with the productive capacity of the fishery resources and their sustainable utilization…States and regional fishery organizations, when confronted with an overcapacity problem which undermines the achievement of long-term sustainability outcomes, should endeavor to limit initially at existing level and progressively reduce the fishing capacity applied to affected fisheries.* The IPOA requires three steps: (1) assessment and diagnosis of the overcapacity problem; (2) adoption of preliminary measures; and (3) periodic reviews and adjustments, with priority given to instances where overcapacity results in unequivocal overfishing. The capacity management should account for all factors affecting capacity in international waters, including fleets mobility and technological progress. The IPOA outlines the action needed to develop national plans and the needed international cooperation. It also contains warnings about reallocation of excess capacity.

The SA-2008 report indicates that countries have taken capacity-related measures at national level. Work to deal with the issue is foreseen in the Strategic Plan. Countries have been asked to undertake a self-assessment. As a response, New-Zealand has undertaken that assessment in 2013. Other members will submit their assessment in 2014. The Strategic Plan also calls members to control and adjust their capacity. It foresees the central maintenance of a list of authorized vessels, the assessment of threats to the SBT fishery from other tuna fisheries [overcapacity], and promotes advocacy on capacity management. One of the most effective way to deter the "race to fish" and ensure compliance with the national allocation is to formally allocate parts of the TAC to national fleets, through an administrative or market mechanism. The latter is the case in Australia, Japan, Korea, New Zealand and Taiwan. It is not the case in Indonesia and the European Union. The situation in Philippines and South Africa is unclear to us.

The issue is complicated by the movements of the fleets between tuna fisheries which would call for an agreement across tuna RFMOs to manage capacity at a regional multi-fishery, multi-species level.

The CCSBT 19 (2012) has agreed on *Flexible management arrangements ensuring SBT fishing capacity is commensurate with fishing opportunities (national TAC allocations). It* agreed that each Member/CNM should: (i) Conduct a self-assessment of its fishing capacity, including non-target fleets, in relation to its national allocation; (ii) Report on the results of this assessment to CCSBT 20 in the agreed annual reporting template; and (iii) Report on action taken (to correct any discrepancy). At CCSBT 20, however, only New Zealand had provided its self-assessment. More assessments are expected from Australia (in the intersession) and from Japan, Korea and Taiwan (at CCSBT 21)..

The jury is still out as to the success of this approach and it is too early to express views on the performance of the CCSBT approach to reduction of overcapacity. It can be predicted, however, that, if the management strategy bears fruit and the stock increases again, forces will increase to increase capacity of single vessels and of fleets, slowing down or threatening recovery.

PR-2014-37: As a minimum, the CCSBT should continue to monitor the list of vessels (authorized and IUU) and develop indices of capacity (e.g. number of vessels as corrected by size, tonnage and technology) to ascertain that capacity is

adjusted to the stock's biological productivity (and hence to the TAC).

PR-2014-38: If the stock builds up, the TAC will increase and higher capacity will be needed to take it. As CCSBT plans to assess the MSY (or MEY) replacement yield, it should simultaneously project the capacity it will need, compare it to the present one and act accordingly.

In this perspective, it could be argued that the CCSBT meets a real difficulty: It does not have a jurisdiction area of its own within which to regulate capacity. In addition its SBT fleet targets also other species in other jurisdiction areas (IOTC, WCPFC and IATTC) and tuna vessels can move in and out the "SBT fleet". It could also be argued that, through its list of authorized Active Tuna Vessels (ATVs) and their characteristics and having a reliable estimate of the fleet needed to catch each national quota, the total fleet of vessels authorized to fish SBT at any time could probably be predicted and its size controlled. Small errors in prediction could be corrected through a capacity trading system to fine tune the system towards the end of each season.

PR-2014-39: A longer-term proposition might be to seek agreement of other tuna RFMOs for a coordinated regional management of tuna fleets capacity to connect to the Global Register of ATVs..

4.1.6 Compatibility of management measures

Kobe criteria

The extent to which the CCSBT has adopted compatible measures as reflected in UNFSA Article 7 (Kobe I).

SA-2008-18: COMPATIBILITY OF MANAGEMENT MEASURES

The CCSBT's arrangements in relation to catch limits and national allocations are compatible between high seas and in areas under national jurisdiction. The CCSBT should continue to ensure that measures are compatible.

The UNFSA requirements relate to: (i) the setting of an effective international cooperation; (ii) Compatibility between the measures taken in EEZs and the high sea and by relevant regional organizations, accounting for biological unity and States' dependence; (v) avoiding harmful impact over the whole resource; (v) Availability of a dispute settlement process and of provisional arrangements; and (vi) Information from coastal States when taking new measures.

All these points are considered in the CCSBT Convention and its Strategic Plan. The measures taken (such as the TACs, the listing of vessels and farms, the VMS, the CDS, the use of sea-birds bycatch avoidance, etc.) are apparently applied both to the high seas and the EEZ, insuring compatibility. Compliance is being monitored and considered adequate. Overall efficiency in rebuilding stocks and protecting ERS is still to be proven. Additional conservation and management measures are unilaterally applied by members on their vessels and in their EEZs: VMS, documentation schemes, port inspections and high seas patrol programs.

The measures needed for improved protection of spawners in Indonesian waters, is the main standing issue. These measures are still pending and their formulation, in collaboration with Indonesia, and their implementation will improve the compliance with this Kobe Criteria.

***PR-2014-40. Because of the central importance of spawning and recruitment for stock rebuilding, additional efforts should be made to develop, in Indonesian waters, spatio-temporal restrictions, equitable and compatible wit the rest of the management strategy*.**

4.1.7 Fishing allocations and opportunities

Kobe criteria

The extent to which the CCSBT has:

a) Agreed on the allocation of allowable catch or levels of fishing effort, taking into account requests for participation from new members or participants as reflected in UNFSA Article 11(Kobe I; Kobe II§.1a);

b) *Developed and applied equitable and transparent allocation criteria, including for new entrants (Kobe I § I.2);*

SA-2008-19: SEPARATION OF TAC DETERMINATION FROM NATIONAL ALLOCATIONS

> *The CCSBT should improve its accountability for decision making and move towards separating the TAC decision from allocation decisions… the CCSBT should consider moving to national allocations based on alternative principles, rather than set tonnages.*

The difficulties met during the period 1997-2003 regarding the determination and allocation of the TAC have been largely resolved. Since then, TACs and national allocations have been regularly set. The CCSBT has made efforts to bring in all fishing States into the Agreement and has allocated part of the TAC to new entrants, based on a non-transparent mix of historical rights and informal negotiations (cf. **SA-2008-17).**

Since the formal establishment of a TAC determination procedure, reinforced by the use of the Management Procedure, the agreed TAC has been split in national allocations based on an agreed distribution key which automatically generates the national allocations that vary with the TAC. These allocations are currently set in accordance with the Resolution on the allocation of the Global Total Allowable Catch that was adopted in October 2011. Some new entrants (e.g. Indonesia or South Africa) consider their initial allocation inadequate and have asked for a revision.

PR-2014-41: This recommendation has been completed and the required separation between the TAC determination and the national allocations is now institutionalized and part of the normal practice of the CCSBT.

4.2 Compliance and enforcement

4.2.1 Flag State duties

Kobe criteria

The extent to which RFMO members are fulfilling their duties as flag States under the treaty establishing the RFMO, pursuant to measures adopted by the RFMO, and under other international instruments, including, inter alia, the 1982 Law of the Sea Convention, the UNFSA and the 1993 FAO Compliance Agreement, as applicable. *(KI.I-7)*

SA-2008-20: ACTION TO ENSURE COMPLIANCE

> *All members and cooperating non-members should continue to take all necessary actions to ensure compliance with conservation and management measures adopted by the CCSBT.*
>
> *There is now an urgent need for CCSBT to finalise longer term MCS arrangements centred on harmonised arrangements under a CDS.*

The PR-2008 did not make a specific recommendation regarding flag State duties, but did state:

> *The CCSBT should thus continue to move forward smartly toward the adoption and implementation of a full CDS.*

This section will confine its analysis to the extent to which CCSBT members are fulfilling their duties as flag States under the CCSBT Convention, pursuant to measures adopted by the CCSBT, and under other international instruments, including, inter alia, the 1982 Law of the Sea Convention, the UNFSA and the 1993 FAO Compliance Agreement, as applicable. Consideration of progress against the recommendations that pertain to longer term MCS arrangements and a CDS will be taken up in **section 4.2.3**.on MCS.

The SA-2014 report provides background on how the CCSBT Convention describes flag State duties of members. While the CCSBT Convention (Article 5) is not as fulsome in its description of the duties of flag States as compared to, for example, Article 18 of the UNFSA, it does contain the essential elements: That Parties are to (1) take all actions necessary to enforce and comply with the Convention and measures adopted by the CCSBT; (2) provide catch and effort data on SBT and ERS to the Commission; (3) exchange of data for research; and (4) exchange of information regarding non Parties. In addition, the CCSBT resolution on Illegal, Unregulated and Unreported (IUU) Fishing and Establishment of a CCSBT Record of Vessels over 24 meters Authorized to Fish for Southern Bluefin Tuna (adopted at the CCSBT15 in 2008) outlines, in paragraph 6, the duties of members and CNMs regarding vessels flying their flag that are entered on that Record. These duties include authorizing the vessels to fish for SBT, ensuring compliance with CCSBT regulations and that licenses and registrations are valid and kept onboard, that the vessels have not engaged in IUU fishing activities or associated with vessels fishing for SBT that are not on the Record, and that the vessel owners are citizens or legal entities within the flag State.

Further, since 2008, Indonesia became a party to the UN Fish Stocks Agreement, which

means that all CCSBT members that are able to become party to the Agreement and UNCLOS have done so. As a result, CCSBT members are required to implement the more detailed obligations contained in Article 18 of the UNFSA regarding their duties as flag State in addition to those stipulated in Article 5 of the CCSBT Convention.

RFMOs must put in place processes to review and assess the compliance of their members and cooperating non-members with the provisions of the RFMO treaty and the measures and decisions of the Commission. Since 2008, the CCSBT has made significant progress in the design and function of its compliance committee and compliance review and assessment processes. These will be discussed in more detail in **Section 4.2.5**. In 2012, the CCSBT agreed to conduct trial Quality Assurance Reviews (QARs) in 2013 of a select set of members (Australia, Japan, Korea and New Zealand) regarding compliance with national allocations of the TAC. As described in the SA-2014, the purpose of QARs is to provide independent reviews to assist Members in identifying how well their management systems function with respect to their CCSBT obligations and to provide recommendations on areas where improvements are needed. Further trial QARs will be conducted in 2014 and 2015.

While the enhanced Compliance Committee and process, Compliance Action Plan and associated compliance policies, and QAR process are still relatively new (e.g., adopted or enhanced in 2011, 2012 and 2013), or in trial phases, it is clear that the CCSBT now has in place a much more robust system to analyze the level of compliance by members, and address deficiencies, than it had in 2008.

PR-2014-42: The CCSBT should continue to ensure compliance by all possible means, including through continued, and full implementation of the enhanced Compliance Committee process, QAR program and compliance action plans and policies. Any additional recommendations on compliance that stem from these new processes should be specific and lead to action by the CCSBT in accordance with the rules and procedures of the Compliance Committee and related Compliance Action Plan and tools. No additional recommendations are necessary.

4.2.2 Port State measures

Kobe Criteria

The extent to which the CCSBT

a) Extent to which the RFMO has adopted measures relating to the exercise of the rights and duties of its members as port States, as reflected in UNFSA Article 23 and the Code of Conduct for Responsible Fisheries Article 8.3. *(KI.5)*

b) Extent to which these measures are effectively implemented. (KI)

c) Promoted the implementation of the FAO Agreement on Port State Measures to Prevent, Deter and Eliminate IUU. (KIII)

SA-2008-21: PORT STATES MEASURES:

Bearing in mind the need to avoid duplication of effort, the [outcome of the] FAO Technical Consultation on Port State Measures that was held in Rome on 23-27

June 2008, provides the Commission with some guidance on a preferred model when considering implementation of any CCSBT Port State measure. That new agreement may not enter into force for several years. In the meantime, the CCSBT should move to adopt a broader set of Port State Measures designed to prevent the landing and transshipment of illegal, unreported and unregulated SBT catches – including by vessels on the CCSBT authorized vessel list.

The SA-2008 further noted that: "Port State measures are a crucial link in the chain of effort to combat IUU fishing and there is a need for a consistent and coordinated approach to port inspections. In considering a suite of integrated monitoring, control and surveillance (MCS) measures, the port State measure is the final important link in the through-chain traceability and accountability process from the point of kill to the retail market.

As of 2008, CCSBT measures required members and CNMs to prohibit the landing of SBT by fishing vessels that were not on the CCSBT Record of Authorised Vessels over 24 meters authorized to fish for SBT.

CCSBT also adopted, in 2009, a Resolution on Action Plans to ensure Compliance with Conservation and Management Measures which required Members and CNMs of pelagic longline vessels to specify in their action plans improvement in port state inspection of transhipment of SBT and actual inspections of catches by Members and CNMs authorities. The resolution further specifies that for effective port state inspection, Members and CNMs should designate foreign ports of transshipment for SBT, prohibit such transshipment at other foreign ports and communicate with those designated port states to share relevant information required for effective inspection.

Since then, as noted in the SA 2014 report, and as evidenced by CCSBT resolutions and other decisions, the CCSBT has prohibited landings of domestic product, exports, imports, and/or re-exports of SBT into and from farms which are not registered on the CCSBT record of authorised farms pursuant to the CCSBT Resolution on the Establishment of a Record of Authorised Farms (adopted in 2010). In 2013, CCSBT adopted a Resolution on Establishing a List of Vessels Presumed to have Carried Out Illegal, Unreported and Unregulated Fishing Activities For Southern Bluefin Tuna. As with other RFMO IUU Vessel Lists, members and CNMS are to ensure that vessels on the CCSBT IUU Vessel List are not authorised to land, transship, re-fuel, re-supply, or engage in other commercial transactions in their ports, except in case of *force majeure*.

At its meeting in October 2013, the Compliance Committee gave consideration to a draft Port State Measures resolution and it was agreed that an intersessional working group meeting will progress this further in 2014[31].

PR-20014-41: *The CCSBT should accelerate its progress in developing a Resolution on Port State Measures consistent with the 2009 FAO Port States Agreement.*

4.2.3 Monitoring, control and surveillance (MCS)

Kobe Criteria:

[31] Paragraphs 38-41 of the CC8 Report at:
http://www.ccsbt.org/userfiles/file/docs_english/meetings/meeting_reports/ccsbt_20/report_of_CC8.pdf

The extent to which the CCSBT:

a) Has adopted integrated MCS measures (e.g., required use of VMS, observers, catch documentation and trade tracking schemes, restrictions on transshipment, boarding and inspection schemes). (KI.1.5, KIII, KI.II.1)

b) Has effectively implemented these measures. (K1)

SA-2008-22: HARMONIZATION, INTEGRATION AND IMPLEMENTATION OF MCS MEASURES:

As the CCSBT does not have its Convention area and SBT migrates into the other tuna RFMOs' areas of jurisdiction, the CCSBT should cooperate with the other tuna RFMOs to optimise harmonisation; improve global effectiveness; and avoid duplication of work.

The CCSBT should prioritise the development of MCS in the context of a compliance plan.

In 2011, the CCSBT adopted a Compliance Plan, which supports the CCSBT Strategic Plan and includes a prioritized Three-Year Action Plan (2012-2014) to address compliance risks and further the development of integrated MCS measures and an MCS strategy based on an assessment of compliance risk. In the first period of implementation, the Action Plan has focused on the following priorities: (i) compliance with national allocations; (ii) implementing the CDS; (iii) IUU fishing; and (iv) transshipment at sea.

Since 2008, it is clear that the CCSBT has made notable and commendable progress in adopting strengthened and integrated MCS measures, and through the adoption of its Compliance Plan and work towards implementing an MCS strategy in nearly all the areas identified in the 2008 SA and PR reports.

PR-2014-43: Considering that both technology and sister RFMOs programmes keep evolving, the CCSBT should continue to improve its MCS measures and scheme, and take additional steps to harmonize its MCS measures with other RFMOs. Details on areas to harmonize further are examined below.

SA-2008-23: HARMONIZATION OF OBSERVER PROGRAMS

Acknowledging the 2007 Kobe commitment to consistent ROP standards, the CCSBT should align its observer program with those of other RFMOs which also have an observer program such as CCAMLR and the IOTC.

In 2003, the CCSBT adopted Scientific Observer Program Standards for the CCSBT Scientific Observer Program that calls for a target coverage rate of 10% for catch and effort monitoring for each fishery. Each member's national scientific observer program is to take into account these standards and be used in achieving the required coverage rates.

There is no international regional observer program (ROP) coordinated and managed through the CCSBT. This issue was discussed during the first meeting of the Compliance Committee in 2006, but no agreement was reached on the issue. It was discussed again in 2010, 2011 and 2012 with regard to proposals made by Australia, but there was no consensus on a ROP. In 2013, the Ecologically Related Species Working Group prepared

an initial draft revision of the CCSBT Scientific Observer Standards to incorporate the minimum data requirements for ecologically related species observer data. During these discussions, it was noted that the CCSBT should consider the WCPFC's observer data requirements for species of concern, and harmonize its standards with those of the WCPFC. In 2013, the Compliance Committee discussed strengthening its observer program standards, and options for advancing needed improvements. A Compliance Committee Working Group meeting has been scheduled for April 2014 to consider, among other things, strengthening the scientific observer program standards.

It is clear that there is hesitation on the part of some CCSBT members in establishing a CCSBT ROP that is coordinated/managed through the Secretariat, Those same members have accepted ROPs in other tuna RFMOs, such as the WCPFC and IATTC where these nations also participate as contracting parties.

PR-2014-44: The CCSBT should accelerate its efforts to strengthen its Scientific Observer Standards and ensure they are harmonized with those of neighboring RFMOs with respect to ERS observer data. The CCSBT should also give serious consideration to the development of a ROP, perhaps through forging a relationship with the WCPFC to allow for mutual recognition or cross endorsement of observers, as the WCPFC and IATTC have done.

PR-2008-6: INTEGRATED VMS SYSTEM

A VMS that is not centralised has limited effectiveness and CCAMLR has adopted a centralised VMS (SA-2008). Although most CCSBT members require their vessels to use satellite-based vessel monitoring systems (VMS) and despite the adoption in 2006 of a CCSBT resolution committing members and cooperating non-members to adopt an integrated VMS system, the CCSBT still does not have such a system in place. The Commission should institute one promptly.

In 2006, CCSBT members agreed to develop and implement their satellite-linked VMS systems for fishing vessels catching SBT flying their flag (the 2006 VMS Resolution). These VMS systems were to be implemented by 1 January 2008. In 2008, the CCSBT adopted an additional resolution (the 2008 VMS Resolution) on a Vessel Monitoring System that established a program to be fully consistent with the requirements of ICCAT, WCPFC, CCAMLR and IOTC, where SBT vessels also operate, as opposed to developing a CCSBT-specific VMS program.

The 2008 CCSBT VMS Resolution requires Members and Cooperating Non-Members to adopt and implement satellite-linked VMS for vessels fishing for SBT that complies with the requirements of the VMS measures in place in the RFMO convention area in which the SBT fishing is being conducted (e.g., IOTC, WCPFC, CCAMLR, or ICCAT). When a CCSBT Member or CNM-flagged SBT vessel is fishing outside of these areas, the IOTC VMS requirements must be followed. However, the CCSBT has adopted its own independent reporting requirements for when an Automatic Location Communicator (ALC) unit is not functioning. The CCSBT also adopted a data confidentiality policy in 2011 that addresses VMS data security issues.

It is recognized that the reason for the CCSBT approach of requiring SBT fishing vessels to

conform to the particular RFMO's VMS rules and procedures is that nearly all CCSBT vessels at any time are simultaneously fishing under the jurisdiction of two RFMOs.. Thus this "conforming approach," as opposed to adopting its own stand-alone requirements, was considered preferable by the Members to avoid a situation where a vessel may have to implement two different VMS systems simultaneously. However, the practical result, as the vessel move between ocean areas, is that the VMS requirements vary among SBT vessels active in the fishery and there is a lack of consistency in the functioning and application of core elements of a VMS, such as applicable vessel size, reporting frequencies (for instance they vary from 4 to 6 hours, depending on the RFMO), recipients and use of the data. In addition, Depending on the requirements of those RFMOs, this can require vessels to report centrally to those RFMOs, but there is no requirement for the SBT fishery vessels to report centrally to the CCSBT and there has been no further discussion or consideration of centralised reporting to the CCSBT.

Further, the IOTC VMS program, which the CCSBT has designated as its default, has considerable room to improve in terms of its design, standards and implementation. For example, unlike the WCPFC and CCAMLR VMS programs, in the IOTC, VMS data is not accessible to the Secretariat, scientists or for compliance purposes in the Compliance Committee, and it does not have established procedures and standards, such as in the event of an ALC breakdown.

It is noted that "the Kobe MCS and TM Working Groups (2010) recommended that T-RFMOs establish standards for VMS messages (on format, content, structure and frequency) and ensure that 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*".*

PR-2014-45: The CCSBT should trigger paragraph 5 of its 2008 CCSBT Resolution and goal 8.3 of its Compliance Action Plan, and review and revise the Resolution to include specific baseline operational VMS standards for SBT vessels regardless of their area of operation, such as reporting frequencies, recipients and use of VMS data (such as by the CCSBT Secretariat, SC/ESC, and ERSWG and Compliance Committees (other than summary reports currently required under the 2008 Resolution). For instance, CCSBT members and CNMs could agree that their SBT vessels operating in other RFMO Convention Areas would transmit the VMS reports sent under those VMS programs to the CCSBT Secretariat.

TRANSSHIPMENT AT SEA

There were no specific recommendations by the SA-2008 or PR-2008 regarding transhipment at sea.

The PR-2008 did observe that although the CCSBT adopted a resolution in 2006 to establish controls on at-sea transshipment, a number of CCSBT members had not -- at that time -- met the deadlines outlined in that resolution.

As noted in the marked-up SA-2008 report, the CCSBT adopted in 2008 a Program for Transshipment by Large-Scale Fishing Vessels (that entered into force on 1 April 2009). The Transshipment resolutions were designed to be fully consistent with the requirements of ICCAT and IOTC, where SBT vessels also operate.

The CCSBT program applies to transshipments at sea from tuna longline fishing vessels with freezing capacity. The program requires, among other things, for carrier vessels that receive SBT transshipments at sea to be authorised and for a CCSBT observer to be on board the carrier vessel during the transshipment. The CCSBT transshipment program for longline vessels operates in conjunction with the ICCAT and IOTC programs. For example, ICCAT or IOTC observers on a transshipment vessel that is authorised to receive SBT are deemed to be CCSBT observers provided that the CCSBT standards are met.

It is noted that the CCSBT has identified issues in the implementation of the Program, including the availability of observers and the ability of observers to accurately monitor transshipments while at sea. The CCSBT also (as discussed in **Section 4.2.2**) does not currently have regulations covering transhipment in port. The Compliance Committee is planning to discuss these implementation issues, and port State measures, at its April 2014 meeting.

PR-2014-46: ***The CCSBT should accelerate its progress in reviewing its Transshipment Program for tuna longline vessels in conjunction with the development of a Port State measures resolution that is consistent with the 2009 FAO Port States Agreement. The CCSBT should also be prepared to develop rules to govern at sea transshipment involving purse seine vessels that are consistent with those adopted by the WCPFC, if at-sea transhipment activities involving such vessels begins to be utilized in the future.***

HIGH SEAS BOARDING AND INSPECTION

There were no specific recommendations by the SA-2008 or PR-2008 regarding high seas boarding and inspection.

The SA-2008 noted that all CCSBT members are also members of the WCPFC and thus are bound by the WCPFC boarding and inspection regime when operating in that Convention area on the high seas. There has been no progress since the 2008 review regarding procedures for high seas boarding and inspection. The PR-2008 did observe that the Self-Assessment suggested that the absence of a CCSBT "convention area" means that implementation of boarding and inspection rules "*would be complex because they would cover all oceans*." That is not a good reason for failing to have such rules, given the clear requirements of the UNFSA

All CCSBT Members that can become party to the United Nations Fish Stocks Agreement (UNFSA) have become parties to that treaty, and so are obliged by its Articles 21 and 22 to accept high seas boarding and inspection under the procedures set out therein. Further, the WCPFC was able to adopt procedures that provided for the unique circumstances of fishing entities, which were agreed to by all CCSBT members and CNMs (with the exception of South Africa, which is not in the WCPFC). Therefore, there would appear to be no real obstacle to the CCSBT in adopting its own provisions to allow for high seas boarding and inspection of SBT vessels regardless of their area of operation.

PR-2014-47: CCSBT should therefore develop as a matter of priority procedures for high seas boarding and inspection of SBT vessels.

4.2.4 Follow-up on infringements:

Kobe Criteria:

The extent to which the RFMO, its members and cooperating non-members follow up on infringements to management measures. (KI)

SA-2008-24: RESPONSES TO NON-COMPLIANCE AND INFRINGEMENTS

The CCSBT should, as a minimum, establish agreed rules on the treatment of overcatch (requirement of payback).

Ideally, the CCSBT should establish a range of penalties in relation to all conservation measures.

In 2011, the CCSBT adopted a Compliance Plan to improve compliance, so that, over time, the Commission, members and CNMs will achieve full compliance with their obligations under CCSBT conservation and management measures. As discussed in **Section 4.2.3**, the Compliance Plan also includes a Three-Year Action Plan to address priority compliance risks, which will be reviewed and updated annually. In addition, the CCSBT adopted three Compliance Policy Guidelines in 2011 to facilitate implementation of the Compliance Plan: (1) minimum performance requirements to meet CCSBT obligations; (2) a corrective actions policy; and (3) MCS information collection and sharing. The Compliance Plan prescribes new tasks for the Compliance Committee, such as with respect to monitoring member and CNM performance in meeting their obligations, strengthening member and CNM compliance and considering corrective actions and remedies. The Compliance Plan became operational in 2012. With the adoption of the three Compliance Policy Guidelines, the Compliance Committee began to carry out its expanded mandate using the Guidelines, including recommending investigations of alleged serious non-compliance and, if necessary, recommending to the Commission corrective actions or remedies; recommending additions or changes to CCSBT obligations to address compliance risks; and carrying out an annual compliance risk assessment.

In 2012, the Compliance Committee recommended that where over-catch by a member or CNM had been established, the Corrective Actions Policy should be applied. Using this new Corrective Actions Policy, one member (Australia) deducted its over-catch for the 2009-2011 fishing season from its 2012 allocation. However, a CNM (South Africa) advised the Extended Commission that it would not repay its over-catches from 2011 and 2012 and the Extended Commission levied no sanction on this CNM.

In 2012, the Commission agreed to implement a trial independent Quality Assurance Review (QAR) of existing member and CNM systems and processes that are in place to implement CCBST measures (priority was given to CDS and VMS) during 2013 and 2014. In 2012 and 2013 the Compliance Committee also developed further performance requirements for CCSBT obligations. The current set of performance requirements include national catch allocations, compliance action plans, transshipment monitoring, records of authorized farms and vessels, MCS measures and decisions (CDS, VMS), scientific observer program, reporting obligations (to both the science and compliance committees and the ecologically related species working group), and ecologically related species measures.

CCSBT also adopted, in 2009, a Resolution on Action Plans to ensure Compliance with Conservation and Management Measures. All members appear to be submitting these action plans, as well as their annual national compliance reports, to the Compliance Committee where they are discussed. Information provided by the Secretariat in the SA-2014 and PR-2014, as well as an examination of various CCSBT documents, suggest that compliance with CCSBT data reporting requirements is good and that Members take steps to address any identified errors or omissions. There is room to improve in some areas it appears, such as with full implementation of required observer coverage levels and the CDS by all Members.[32]

PR-2014-48: The CCSBT has taken steps since 2008 to considerably strengthen its compliance assessment processes and tools, including a framework for applying a range of penalties for instances of Member and CNM non-compliance with CCSBT measures. CCSBT should continue to refine these tools and ensue they are transparently and fairly implemented when necessary to ensure legitimacy and integrity in its system, thereby creating an incentive for compliance among members and CNMs.

4.2.5 Cooperative mechanisms to detect and deter non-compliance

Kobe Criteria

The extent to which the CCSBT:

a) Has established adequate cooperative mechanisms to both monitor compliance and detect and deter non-compliance (e.g., compliance committees, vessel lists, sharing of information about non-compliance). (KI.1.7)

b) These mechanisms are being effectively utilized. (K1)

SA-2008-25: COOPERATIVE MECHANISMS TO MONITOR COMPLIANCE

All Members and Cooperating Non-Members should submit their national reports to the CCSBT.

The CCSBT allocate sufficient time to the CC and the Extended Commission to allow them to complete both routine and development work each year.

The first meeting of the CCSBT Compliance Committee was held in 2006. For the next several years, the Compliance Committee focused on the development of an integrated MCS system and did not undertake a routine assessment of member and CNM compliance with CCSBT measures. In 2010, the CCSBT adopted revised terms of reference for its Compliance Committee. The Committee now meets every year for two to three days in advance of the Commission and EC Meetings. The Committee is to, among other things, monitor, review and assess compliance with all conservation and management measures adopted by the Extended Commission and to monitor, review and assess the quality of data (both accuracy and timeliness) submitted. Using national reports and compliance action plans submitted by members and CNMs, the CCSBT compliance committee reviews

[32] CC8_04_Compliance_with_CCSBT_Management_Measures Rev2.pdf

member and CNM implementation of specific obligations prescribed in CCSBT conservation and management measures that are in force. It does not review compliance with obligations of the Convention more broadly.

The CCSBT compliance process does not prescribe a compliance status for each member or CNM; rather the Committee identifies areas of possible non-compliance or discrepancies (such as between the reported catch and the catch estimated by the Secretariat) and seeks information and explanations from the member or CNM present.

At present, the CCSBT compliance process also does not appear to have a standard for distinguishing between non-compliance of a minor or technical nature and serious non-compliance that, for instance, undermines the effectiveness of the Convention or measures adopted by the CCSBT.

However, its 2011 Corrective Actions Policy (described above in **Section 4.2.4**) outlines specific kinds of corrective actions that may be recommended by the Compliance Committee that are graduated to specific degrees of non-compliance (i.e., moving from capacity building/training to trade or market restrictions). Decisions of the CCSBT are taken by a unanimous vote of the Members present at the Commission meeting.[33] It is noted that this type of decision-making process may have an impact on the ability of the CCSBT to impose sanctions on its members or CNMs in the future.

In 2013, the CCSBT adopted a Resolution on Establishing a List of Vessels Presumed to have Carried Out Illegal, Unreported and Unregulated Fishing Activities For Southern Bluefin Tuna.

All members appear to be submitting their national compliance reports on time to the Compliance Committee, where they are reviewed.

PR-2014-49: The CCSBT has taken steps since 2008 to considerably strengthen its compliance assessment processes and tools, including reworking its Compliance Committee terms of reference, giving the Committee adequate time to meet, and adopting an IUU Vessel List measure. Members and CNMs are cooperating with the process, providing their national reports on time and submitting themselves to a multilateral review of their compliance in the Compliance Committee. The CCSBT should continue implement these tools fully and ensure non-compliance is transparently and fairly assessed, thereby creating an incentive for compliance among members and CNMs. The CCSBT should also consider mandating that a member who is being considered for a sanction under its policies may not participate in the decision-making on that issue.

4.2.6 Market-related measures

Kobe Criteria

a) Extent to which the RFMO has adopted measures relating to the exercise of the rights and duties of its members as market States. (KI.1.5, K1.II.1, KIII)

b) Developed traceability from *catching to markets (KI.I.8) and harmonised trade-tracking programmes (KI.II.1); Implementation Catch Documentation Schemes (KIII)*

[33] See article 7 of the CCSBT Convention and rule 6 of the CCSBT Rules and Procedure.

c) Extent to which these market-related measures are effectively implemented. (K1)

SA-2008-26: CATCH AND TRADE DOCUMENTATION

The SA-2008 report recognizes that *the CCSBT Trade Information Scheme (TIS) appears to be working reasonably well with respect to catches of SBT that actually enter international trade.* Noting that the TIS could not track catches not entering the international trade and recognizing the need for a more complete and reliable system, it *recommended that:*

> *The CCSBT should thus continue to move forward smartly toward the adoption and implementation of a full Catch documentation system (CDS).*
>
> *The CCSBT should implement a CDS as matter of urgency. Pending implementation of a CDS, all members and cooperating non-members should be required to implement the TIS.*
>
> *The CCSBT should monitor all market and port states and encourage compliance with CCSBT monitoring and trade measures.*

The Kobe MCS Working Group (2010) added specifications to these recommendations, asking the tRFMOs to:

- Establish or expand the use of CDS, e.g. to species not currently covered and to which current conservation and management measures apply.
- Ensure compatibility between new or expanded CDS and existing certification schemes already implemented by coastal, port and importing States.
- Cooperate with other RFMOs to develop a common/harmonized CDS form and the use of electronic systems and tags to enhance the efficiency, effectiveness and utility of a CDS.
- Take into account fish caught by purse seine fisheries and delivered to processing plants when implementing an expanded CDS.
- Consider a tagging system for fresh and chilled products to improve the implementation of new or expanded CDS.
- Develop a simplified CDS form to cover catches by artisanal fisheries that are exported (see Appendix 3, EU form as an example).
- Provide technical assistance and capacity building support to assist developing countries in implementing existing or expanded CDSs. Ensure that funds that currently exist in RFMOs can be used for this purpose.

The CCSBT adopted a comprehensive CDS in October 2008 and it has been implemented since January 2010. The CDS to monitors all trade in SBT between Members and CNMs

and from Members and CNMs to those States that are not members or CNMs of the CCSBT. The EU is the only CCSBT CNM that has not yet implemented the CDS.[34]

The CCSBT Secretariat subscribes to the Global Trade Atlas (http://www.gtis.com/english/GTIS_About.html) to assist in identifying trade in SBT between States not party to the CCSBT (or CNMS) and also the EU (since it is not yet implementing the CCSBT CDS). The CCSB Secretariat has undertaken correspondence with States that have been identified as potential markets for SBT in order to seek the cooperation of such States with the conservation and management work of the CCSBT. The Secretariat has reported that the United States, Mauritius and Singapore have indicated their willingness to cooperate with the CCSBT.

The inability of the CCSBT CDS to track trade between non-cooperating non-members has been identified as potentially significant loophole in the CCSBT MCS scheme. In 2012, at CCSBT19, Fisheries Development Council International (an observer to the CCSBT) reported that there is research to support its belief that substantial quantities of SBT have been imported by non-members of CCSBT who are not required to implement, and may not be cooperating with, the CCSBT CDS. This organization requested that Commission take necessary measure to ensure that such loophole is filled.

The CCSBT 3-year Compliance Plan includes several action items for identifying non-member market and port States, reviewing SBT trade data, and analyzing MCS and trend market data.

Also, in 2013, the CCSBT Secretariat conducted a training workshop on the CDS for Indonesia.

PR-2014-50: The initial recommendations are already fairly well implemented. CCSBT should explore all available options for tracking the trade of SBT between those States that are not members or CNMs, and continue to engage in outreach (both from the Secretariat and individually as CCSBT members or CNMs, such as through diplomatic channels and in bilateral contacts) to those non-member nations to encourage their participation in and implementation of the CCSBT CDS.

4.3 Decision-making, transparency and dispute settlement

4.3.1 Decision-making and transparency

Kobe Criteria

a) Extent to which RFMO has transparent and consistent decision-making procedures that facilitate the adoption of conservation and management measures in a timely and effective manner. (KI)

b) Extent to which the RFMO is operating in a transparent manner, as reflected in UNFSA Article 12 and the Code of Conduct for Responsible Fisheries Article 7.1.9. (KI)

c) Extent to which RFMO decisions, meeting reports, scientific advice upon which decisions are made, and other relevant materials are made publicly available in a

[34] CC8_04_Compliance_with_CCSBT_Management_Measures Rev2.pdf

timely fashion (KI)

SA-2008-27: DECISION-MAKING

> *Consensus decision making does mean that some decision making is delayed but the Commission could also consider that some day to day operational decision making could be devolved to the Chair or the Executive Secretary (by unanimous decision of the Commission).*

Article 7 of the CCSBT Convention prescribes that decisions are to be taken by unanimous vote of members present at the CCSBT meeting. So, while voting is the mechanism, decisions are made by unanimity.

In the past, the requirement for unanimity has resulted in deadlocks (most notably prior to the 2008 performance review) regarding setting a global TAC, when important management decisions could not be made by the CCSBT. More recently, progress on establishing a regional observer program and certain ERS measures have been frustrated by the same requirement. Furthermore, problems are also more likely to emerge regarding the adoption of measures to implement aspects required by the UNFSA or agreed international standards, but which are not provided for explicitly in the older CCSBT Convention.

To reduce delays as much as possible within the limits fixed by the Convention, the CCSBT has agreed to an intercessional decision-making process by Circular (i.e. by mail/email), which allows for decisions of an operational nature to be agreed efficiently.

PR-2014-51: As changing the CCSBT decision-making model (from unanimous to majority decision-making) would require amending the Convention, no specific recommendations are offered. However, should the CCSBT decide to embark on a process to evaluate and modify its Convention provisions – as several other RFMOs have done in the last decade (e.g., see NAFO, NEAFC, ICCAT and IATTC) and which is noted in the CCSBT Strategic Plan- there are a number of alternative models for decision-making (currently employed by other RFMOs) from which it could choose.

SA-2008-28: TRANSPARENCY

> *As [the rules and procedures on observers] are not in keeping with the spirit of current international fisheries governance frameworks, the CCSBT should consider modernizing Rule 3 of its rules of procedure.*
>
> *The CCSBT and its members should improve openness by better publication of the rules for observers. One possible option would be to put the information about the current arrangements to accept observers on the CCSBT website.*

The UNFSA Article 12, referred to in the Kobe criteria above indicates that in RFMOs: (i) States shall provide for transparency in the decision-making process and other activities; (ii) Representatives from other IGOs and from NGOs concerned …shall be afforded the opportunity to take part in meetings …as observers or otherwise, as appropriate, in accordance with the procedures of the organization or arrangement concerned; (iii) Such procedures shall not be unduly restrictive in this respect and (iv) Such IGOs and NGOs

shall have timely access to the records and reports of such organizations and arrangements, subject to the procedural rules on access to them.

The first part of UNFSA Article 12 refers to release of data and reports (assessments, etc.) collected and produced by CCSBT. This issue, in which there are trade-offs between transparency and confidentiality has been dealt in **Section 4.2.1**. The formal definition of a Management Procedure (**cf. Section 4.1.1**) and the release of information on the processes leading to its construction, use and performance assessment, represent an important step towards full transparency in decision-making.

The second part of Article 12 relates to observers. In that respect, SA-2008 noted that, in contrast with the provision (iii) of that Article 12, *the current CCSBT rules and procedures (Rule 3) on observers appear to create an unduly restrictive process to admit such observers that is not in line with other tuna RFMOs. For example, both WCPFC and ICCAT have a 50-day application period (half of what CCSBT requires). The WCPFC and ICCAT will admit observers unless a majority of members are opposed. By contrast, CCSBT rules allow a single member to successfully block the participation of an observer.*

CCSBT has taken some additional steps since 2008 to enhance its transparency in relation to observers. For example, there is now a dedicated page on the CCSBT website for meeting attendance by observers that contains the rules and other information. In addition, CCSBT changed its rules (Rule 3) for observers as follows: (1) The application period has been reduced from 100 to 50 days; and (2) created a status of long-term observers. Once granted long-term status, observers are automatically invited to future meetings and do not have to re-apply for observer status each time. The current list of "long term" observers is available at: http://www.ccsbt.org/site/observers_attendance.php.

In addition, similar to several other tRFMOs, the CCSBT Compliance Committee is open to accredited observers. However, Member and CNM reports or other meeting documents are not publically available online. Once observers register to attend meetings of the CCSBT, they are granted access to the documents for that specific meeting only. Observers are also advised that they are required to follow the CCSBT's confidentiality requirements in relation to those documents.

Finally, in 2013, the CCSBT also took steps to increase the public accessibility of Commission reports and other information by making it clear on the CCSBT website that most documents from 2002 onwards that are not on the website are available to the public and can be obtained by making a request to the CCSBT Secretariat.

PR-2014-52: The present policy and regulations of CCSBT regarding observers are now in line with international standards and the initial recommendations can be considered as fulfilled and dropped.

4.3.2 Decision-making and dispute settlement

Kobe Criteria:

Extent to which the RFMO has established adequate mechanisms for resolving disputes. (KI)

KOBE-4: DISPUTE SETTLEMENT

Establish adequate mechanisms for dispute settlement.

The SA-2008 and PR-2008 discussed this fundamental governance issue but offered no specific recommendations. As a place-holder, we repeated therefore the Kobe criteria itself for easy reference.

The PR-2008 noted that *with the entry into force of the UNFSA in 2001… an additional set of dispute settlement rules now apply to disputes concerning the interpretation or application of the Convention, including a dispute concerning the conservation and management of SBT, at least vis-à-vis States Parties to the UNFSA.* The SA-2008 noted *that to change the dispute settlement arrangements of the CCSBT would require amendment of the Convention*. On that matter, however, the PR-2008 concluded that *in light of this development [the adoption of the UNFSA], it may not be necessary for the CCSBT to amend the Convention to achieve a compulsory and binding regime for the settlement of disputes.*

The dispute settlement provisions prescribed the CCSBT Convention and the timeline and outcomes of the *Southern Bluefin Tuna case (Australia and New Zealand v. Japan) are well documented in the marked-up SA-2008 and PR-2008 documents.* Since 2008, there has been no further consideration of the issue of amending the Convention or taking other steps regarding refining the CCSBT dispute settlement provisions. Given the growth in the membership of the CCSBT and the continued poor status of the SBT stock, having an effective conflict resolution procedure is even more important. The still very low stock level and the risk of important changes in the SBT stock distribution and stability resulting from climate change reinforces the need for a more reactive and effective dispute settlement mechanisms.

PR-2014-53: It is recommended that the CCSBT seriously consider developing an alternative approach to dispute settlement/conflict resolution to avoid the potential for future stalemates that could significantly compromise the conservation and management of the SBT resource. As noted by the PR-2008, the additional dispute settlement rules provided by the UNFSA could usefully be used as now all CNMs and members of the Extended Commission, except Taiwan, are party to the UNFSA.

4.4 International cooperation

4.4.1 Relationship to cooperating non-members (CNMs)

Kobe Criteria:

Extent to which the RFMO facilitates cooperation between members and non-members, including through the adoption and implementation of procedures for granting cooperating status. (KI)

KOBE-5: COOPERATING WITH NON-MEMBERS

Extent to which the RFMO facilitates cooperation between members and non-members, including through the adoption and implementation of procedures for granting cooperating status.

No recommendations are available from either the SA-2008 or PR-2008 on that important issue with strong implications when addressing IUU. The above recommendation was created from the criteria as a place holder, for easy reference. CCSBT has a well-developed system for engaging non-members and providing Cooperating Non Member status with a variety of benefits, including allocations, and obligations, as a transitional step to membership.

As noted by the SA-2008, the six CCSBT Members are Japan, Australia, New Zealand, Taiwan, Republic of Korea and Indonesia and its three Cooperating Non-Members are the European Union, South Africa, and the Philippines.

The marked-up SA-2008 report indicates that both South Africa and the European Union have recently expressed a significant interest in becoming a Member of the CCSBT. As part of this dialogue, the CCSBT has indicated to South Africa that it could receive an increased allocation if it acceded to the CCSBT Convention. With respect to the European Union, in 2012 the CCSBT modified the *Resolution to Establish an Extended Commission and an Extended Scientific Committee* in order to allow Regional Economic Integration Organisations to join as Members.

The CCSBT has a long-standing action plan for SBT (adopted at CCSBT 6 in 2000)[35] that also addresses non-members to encourage them to join and cooperate with the CCSBT. This action plan provides for the imposition of trade-restrictive measures on non-members identified under the action plan. Since its adoption, there have been four resolutions under the action plan (Cambodia, Honduras, Equatorial Guinea, Belize (twice) and Indonesia). However no trade-restrictive measures have been triggered since 2005. Some concern remains and CCSBT 19 has also called on Parties to include in their report about national fishing capacity comments on threats from NCNMs' fleets.

PR-2014-54: CCSBT has given particular attention to the subject of non-members with a view to facilitate their participation in the governance process. No particular recommendation is therefore needed except to continue paying attention to the issue and pursue its efforts towards the remaining non-members and potential new-comers in the fishery.

4.4.2 Relationship to non-cooperating non-members

Kobe Criteria:

Extent of fishing activity by vessels of non-members that are not cooperating with the RFMO, as well as measures to deter such activities. (KI)

[35] http://www.ccsbt.org/userfiles/file/docs_english/operational_resolutions/action_plan.pdf

KOBE-6: NON-COOPERATING NON-MEMBERS

Members and cooperating non-members of CCSBT should share information about non-cooperating non-members' vessels fishing on SBT and take appropriate measures to deter the activities of such vessels.

UNFSA Article 17.4 provides that States which are members or participants of (i.e. cooperating non-members) of regional fisheries management organizations and arrangements(RFMOs/As) shall share information about the fishing activities of vessels from non-cooperating non-members engaged in fishing operations on relevant stocks and shall take measures consistent with RFMOs/as agreements and international law to deter activities of such vessels which undermine the effectiveness of the organizations' management measures.

No recommendations where provided by either SA-2008 or PR-2008 on that issue and the recommendation above has been formulated as a place holder and for easy reference, based on the Kobe criteria itself.

CCSBT has taken meaningful steps to develop a robust system for engaging non-cooperating non-members, such as through its CDS, its 3-year Compliance Action Plan, Authorized Tuna Vessels (ATVs) and presumed IUU vessels list, as well as other compliance tools. CCSBT has also directed members to engage in diplomatic outreach (**See Sections 4.2.4 to 4.2.6).** In addition, all the efforts of CCSBT to possibly integrate all the actors of the fishery into CCSBT can be credited also to its fight against IUU.

For example, at CCSBT 20 in 2013, the Secretariat reported to the Commission that, as requested by CCSBT19, letters had been sent to China, Hong Kong, Singapore and the USA inviting them to attend the next meetings as observers. As a result, Singapore attended CC8 and the USA was planning to, but was unable to participate due to its government shutdown. Hong Kong did not attend, but communicated its awareness of the importance of conservation matters and its intent to continue to improve in this area. CCSBT Members also committed to engage bilaterally with China.

PR-2014-55. ***CCSBT has given particular attention also to the subject of non-cooperating non-members with a view to deter the activities of their vessels. CCSBT should continue its efforts to improve collaboration with all the actors in the fishery to continue to strengthen its efforts in combating IUU fishing activities and ensure the effective implementation of its measures and programs. In addition, the development of port State measures in line with the FAO Port States Agreement (as is discussed in section 4.2.2) could greatly assist in this area.***

4.4.3 Cooperation with other RFMOs

Kobe Criteria
a) Extent to which the RFMO cooperates with other RFMOs, including through the network of Regional Fishery Body Secretariats. (KI)
b) Harmonized programmes (KI.II.1), listings (KI.II.2) and control measures (KI.II.3);

Standardized forms (KI.II.4)

The issue of cooperation between tRFMOs is particularly important because of the similarities and sharing that exist *de facto* in the resources, the fishing vessels, owners and flag States (both harvesting and supply vessels), and the markets. Two types of issues are to be considered: (i) the specific collaborations needed on specific issues; and (ii) the processes and mechanisms put in place to facilitate and promote collaboration. The first have been touched on in many places in other areas of the Report. In this section, we will focus on processes and mechanisms.

SA-2008-29: COOPERATION WITH OTHER RFMOS

> *There are significant opportunities for the CCSBT to work more closely with and to harmonise measures with other RFMOs, especially with the other tuna-RFMOs, and this should be a priority area for the CCSBT.*

This recommendation from SA-2008 is strengthened by a more specified one from PR-2008 that states:

> *The CCSBT should add combating IUU fishing activities to the list of cross-cutting issues affecting all tuna RFMOs, as well as monitoring and regulating transshipment, particularly given CCSBT's geographical overlap with the Indian Ocean Tuna Commission and the Western and Central Pacific Fisheries Commission. (PR-2008)*

The Secretariat reports annually to the CCSBT on the range of efforts to cooperate with and engage in activities with other RFMOs and organizations, including observing and participating in various RFMO and FAO-related meetings. As reported in **Section 4.2.3,** the CCSBT has also developed MOUs with IOTC and ICCAT regarding its at-sea transhipment monitoring programs, and has harmonized its ERS and VMS measures with those of ICCAT, IOTC and WCPFC.

The Kobe Process has generated a large number of recommendations which require time and resources to be as fully implemented as possible in the not-too-distant future (See **Annex 2**). The CCSBT has been an active participant in the Process, including the workshops. In that process, it was agreed that there is a need for all tuna RFMOs to harmonize their data collection and sharing regimes. There has not been much progress, however, in advancing this among the tuna RFMOs. In fact, the Kobe process has recommended a variety of harmonization needs (joint working groups, databases, enhanced sharing of scientific data, MCS and IUU-related information, harmonized MSC measures, IUU lists, transhipment documentation, creation of global vessel lists, etc.), which have not been significantly advanced. During CCSBT 20 (2013) The Secretariat reported that CCSBT had worked on implementing practically all the Kobe III recommendations with the exception of a few low priority ones. While evidence was not provided, this Report shows a large number of cases confirming the statement. Some of the issues recommended by the Kobe II 2010 WGs and that do not seem to have received enough attention yet include:

- Development of standardized executive summaries on stock status and management recommendation. While this might be useful for all tRFMOs (and would be a good input into FAO FIRMS), If such standard statements are not available yet in CCSBT they would usefully be introduced to facilitate historical records of stock status and management advice;
- Establishment of a list of common issues to be dealt with jointly by the tRFMOs (e.g. large-scale ecosystem modeling; impact of climate change; monitoring of small-scale fisheries);
- Cooperation through programmes integrating ecosystem and socioeconomic approaches to support multispecies conservation programmes (considered not relevant).

In 2011, the Joint Technical Bycatch Working Group (JTBWG) underlined the need for joint work between tRFMOs to address, *inter alia*: (i) harmonized observers data standards (standardization of data collection protocols) ; (ii) interoperable databases; (iii) a joint by-catch research programme; (iv) pilot video observer programmes; (v) capacity-building in developing countries; (vii) Ecological Risk Assessment (ERA); (viii) implementation of the relevant FAO IPOAs; (ix) effective compliance; (x) artisanal fisheries; and (xi) handling and release standards.

PR-2014-56: Given the reliance of the CCSBT, in many ways, on cooperative relationships with other RFMOs for "harmonizing" with (and using directly) a number of those neighbouring RFMOs' measures, the work called for by the Kobe process and its 2010 workshops is particularly relevant. The CCSBT should look seriously for opportunities to re-invigorate discussions among its neighbouring RFMOs to work more closely to implement the Kobe recommendations. Key areas of collaboration include: more systematic exchange of data and information (interoperable databases); additional harmonization of measures; conducting more joint scientific workshops; increasing coordination of compliance work, particularly to combat IUU fishing and conserve and manage ERS; large-scale tagging programmes; ecosystem approach implementation; large scale ecosystem-based modelling; Management Strategy Evaluation; harmonisation of MCS systems; common formats for assessing compliance (with data reporting; infringements, etc.); capacity-building (e.g. training courses); and development of common positions at IUCN, CITES, CBD, and the UNGA.

4.4.4 Special requirements of developing States

Kobe Criteria:

a) Extent to which the RFMO recognizes the special needs of developing States and pursues forms of cooperation with developing States, including with respect to fishing allocations or opportunities, taking into account UNFSA Articles 24 and 25, and the Code of Conduct of Responsible Fisheries Article 5. (KI, KII, KIII)

b) Extent to which RFMO members, individually or through the RFMO, provide relevant assistance to developing States, as reflected in UNFSA Article 26. (KI, KII, KIII)

SA-2008-30: SPECIAL REQUIREMENTS OF DEVELOPING STATES

No change [in the CCSBT policy regarding developing Members and CNMs] is necessary.

The issue is addressed in UNFSA, Preamble, Article 11 and, more importantly in Part VII Articles 24 (recognition of the special requirement); 25 (Forms of cooperation) and 26 (special assistance for implementation of the Agreement).

This Kobe criteria given above refers to 2 key areas of needs from the developing countries: (i) the allocation of a fair share of the available resources; and (ii) the development of capacity to participate meaningfully into the work of the CCSBT. The question of allocation has been dealt with in Section 4.1 (SA-2008-17), 4.1.7 (SA-2008-19) and 4.4.1 (KOBE-5). The following will focus on capacity-building.

The SA-2008 report recognized that the CCSBT (unlike other newer tuna RFMO conventions) did not differentiate between the needs of developing and developed States but that, in practice, these needs were recognized. For example, even before becoming a member, Indonesia was given financial assistance to attend CCSBT meetings from the general budget of the CCSBT and the creation of the CNM status (without obligation to make a financial contribution) was motivated in large part by the recognition that full membership was financially difficult for developing States.

Historically, CCSBT members have also provided, bilaterally, assistance to developing States. Developed CCSBT members have also been involved in providing assistance to developing States involved in SBT. For example, Australia and Japan provided support including financial assistance to Indonesia for its SBT catch assessment.

The CCSBT itself has limited funds for assistance. Nonetheless, in 2011, the Secretariat organised a technical briefing[36] for Indonesia on the Operating Model and Management procedure. In 2012, the CCSBT formally created an assistance fund to support participation in workshops and capacity-building (e.g., training) initiatives in developing countries. In 2013, it conducted a training workshop on the CDS in Indonesia. In 2013 and 2014, the Finance and Administrative Committee (FAC) allocated a small amount ($12,500) for assistance to developing Members and CNMs to support their attendance in relevant workshops and to also be used by the Commission to fund training and workshops held for developing Members and CNMs. It is expected that the Quality Assurance Review of Indonesia being conducted in 2014 will provide further information concerning areas where Indonesia would most benefit from CCSBT assistance.

PR-2014-57: As is noted it is Strategic Plan, the CCSBT should develop a more comprehensive strategy for addressing the capacity building needs, particularly with regard to compliance with CCSBT obligations, programs, and implementing the CDS, of developing State members/CNMs. One model to consider is that of the IOTC, which conducts compliance "missions" in country to assist developing State members in identifying areas of deficiency and in developing an action plan to improve.

[36] by Dr Campbell Davies from CSIRO, Australia.

4.5 Financial and administrative issues-

4.5.1 Availability of resources for RFMO activities

Kobe criteria
The extent to which the financial and other resources needed to achieve the aims of the RFMO and to implement the RFMO's decisions (KI), e.g. in research programmes, meetings and assistance to developing States are available.

SA-2008-31: POLICY & MANAGEMENT ADVICE

> *The CCSBT should consider establishing a position at the Secretariat to: (i) provide policy and management advice; (ii) take a more proactive role in seeking advice/positions of members; and (iii) enhance implementation of the Strategic Plan.*

The CCSBT has progressively complied with this recommendation by: (i) occasionally providing consultancy funds for policy development work, as initial step that allowed the Secretariat to take on an increased role in developing and modifying recommendations /resolutions for the CCSBT; and (ii) subsequently funding the position of Compliance Manager (in place since 2012). The duties of the position include: (i) provision of compliance policy and planning advice to the CCSBT EC and CC; (ii) administration of the Secretariat's compliance systems such as the CDS, Transhipment monitoring programme; Monthly catch reporting system and report on initial quota allocations and final catch; (iii) monitoring of compliance with conservation and management measures; (iv) provision of information, advice, assistance and feed-back to Members and other States on improvements to compliance; and (v) administration and management of the Compliance Plan, Compliance policies (including audits) and updated compliance risk assessment. This additional staff resource has apparently already allowed the Secretariat to play a more proactive role in these duties.

PR-2014-58: This recommendation has been fully implemented.

FINANCIAL RESOURCES

Are the financial resources put at disposal of the CCSBT by its members sufficient to run the programme it has adopted? A detailed reading of the EC meeting reports and more particularly the Finance and Administration Committee (FAC) reports for the 2008-2013 meetings shows that the budgets provisionally allocated have been practically never been entirely spent. The Secretariat indicates that the CCSBT has allocated the necessary additional resources when a need for such resources had been identified, for example funding consultancies and, more recently, the recruitment of a Compliance Manager and the aerial survey (see below).

PR-2014-59: This, together with the fact that there do not seem to be any indication of under-delivery, would indicate that resources allocated by Members to the Commission are more than sufficient to cover planned activities. The resulting systematic carry-over is probably an illustration of the Secretariat's concern with

financial efficiency. However, systematic carry-over is usually not considered good budgetary practice as, in principle, unless all funding requests were accepted during the budgeting process[37], the savings indicate that activities that were not funded for lack of funds could have been undertaken and suffered unnecessarily from the decision. Uncertainties are always an issue but if they always result in carry-over they may indicate there may be room for improved planning (with better risk assessment). A more professional advice should be given by the Auditor.

FUNDING OF THE AERIAL SURVEY

The only recurrent problem of resources mentioned in the CCSBT reports is that of the cost of the scientific aerial survey of the Great Australian Bight that provides precious data for the operational model and the management procedure. Until now, the survey had been entirely funded by Australia. Following unresolved requests since 2004 from Australia for cost-sharing, a contribution of $100,000 (about 15% of the cost) from the CCSBT budget has finally been agreed for 2013 and 2014.

With the documents at hand, this reluctance to equitably co-finance this management instrument is not easy to understand. On the one hand both costs and benefits of that survey of common interest should be shared. Simulations of the MP developed without the aerial survey data and with it should be able to show the gain in precision brought about by the survey and the cost to members, would that survey stop, as the TACs would have to be reduced to account for increased uncertainty if the rebuilding probability inbuilt in the MP is to be conserved. On the other hand, it is clear that the problem, if any, is that of the equitable sharing of the overall cost of the research (including the aerial survey but also the tagging programme, trolling surveys, close kin analysis, modelling, etc.) supporting the CCSBT decision-making process. research costs, of which the aerial survey is just one of the elements (see also the discussion on effectiveness (**Section 4.5.2**).

The PR-2014 does not have the elements needed to propose any recommendation on this subject.

4.5.2 Efficiency and cost-effectiveness

Kobe criteria

The extent to which the RFMO has…

a) Efficiently and effectively managing its human and financial resources, including those of the Secretariat.

b) Assessed its performance using Kobe I criteria (KI.I.9)

c) Contributed to the development of common criteria and best practices as tools to guide the strengthening of these organizations;

[37] In all fishery management institutions, the request for funds is usually higher that the budget available!

SA-2008-32: SECRETARIAT EFFICIENCY AND EFFECTIVENESS

The Secretariat should continue to run the CCSBT efficiently and effectively.

The SA-2008 does not dwell much on that issue and a reflection on the matter by the PR-2014 is offered below.

The wording of the criteria refers to effectiveness and efficiency of the RFMO Secretariat in using its budget and staff to reach the outcomes expected by its members. The issue is complex as the Secretariat performance must be distinguished from the performance of the RFMO as a whole. The CCSBT goal is, presently, to ensure sustainable use of SBT and, more specifically, to rebuild the stock to 20% of its virgin biomass by 2035. Reaching this goal depends on Member's behavior as much if not much more than on the Secretariat effectiveness and efficiency. Therefore this recommendation is seen as a partial analysis of the CCSBT performance, i.e. the performance of the Secretariat in implementing the Members' decisions in the best possible way, considering the resources put at its disposal.

Article 10.3 of the CCSBT Convention indicates that: *The Secretariat functions shall be prescribed by the Commission, and shall include the following:*

a) Receiving and transmitting the Commission's official communications;

b) Facilitating the collection of data necessary to accomplish the objective of this Convention;

c) Preparing administrative and other reports for the Commission and the Scientific Committee.

This defines the Secretariat as purely administrative. It seems to us that this does not properly reflect the work that the Secretariat has progressively been asked to take on board, as illustrated by the agreement to recruit a Compliance Manager. It might be useful to examine the present functions of the Secretariat and define clearly the objectives assigned to it in order to objectively assess its performance.

Two performance criteria are referred to in the Kobe criteria: effectiveness and efficiency.. The capacity to run both assessments at present is limited by:

1. Effectiveness refers to the extent to which the Secretariat reaches the outcomes expected from its activity by the Members. The fact that the TORs of the Secretariat and its specific expected outcomes are not clearly spelled out does not facilitate an appraisal of the effectiveness. The Strategic Plan would be a golden opportunity to define the strategic and interim targets expected from the Secretariat, distinct from those of the Commission as a whole;
2. Efficiency refers to the Secretariat's capacity to obtain such outcomes at least costs It is very hard to estimate efficiency as there are no international benchmarks against which to compare the CCSBT Secretariat. In addition, the specific conditions within which each tuna RFMOs operates (e.g. its environment, species bio-ecological and economic parameters, member countries' capacity) are so different that simple comparisons of rates in meeting frequency, staff and administrative costs, stocks managed per unit cost, etc. may not be very meaningful.

As a consequence, it might be more feasible to "simply" look at "internal" (e.g. self-referenced) effectiveness and efficiency. Effectiveness could be measured by keeping a formal record of recommendations for the Secretariat to implement, with a brief record of

their implementation. The rate of implementation would be an index or performance, including in the ability to obtain from Members the means needed to implement their decisions. Efficiency could be measured by the capacity to find alternative, cheaper of more effective solutions (e.g. replacing paper by electronic information supports; facilitating e-meetings as opposed to in-person ones; obtaining economies of scale through collaboration with other RFMOs.

Considering the Strategic Plan's reference to the possibility to use MEY as the rebuilding SBT target, the funding of the CCSBT research and governance, the sharing of costs among members as well as on priorities and time frames, it seems obvious that adding some economic component to the presently exclusively bioecological foundation of CCSBT decision-making would be useful.

It would really be useful to set the "efficiency" problem in terms of the potential payoff to the research and governance investment and also of the opportunity cost of decisions being made now, e.g. within a sort of investment appraisal framework

If we consider the investment in stock-rebuilding simply in terms of the ratio between direct costs and revenues, the CCSBT goal is to rebuild the stock from its present 5% of the virgin stock biomass to 20% of that level by 2035 (multiplying biomass by 4). All things (including the market) remaining equal, the present value would also quadruple (from AU$ 375 million to AU$ 1.5 billion dollars). Assuming a linear growth, the cumulative value of the catch for the 2014-2035 period would be around 22 billion dollars while the cumulative cost of the CCSBT for the same period (with a 5% yearly increase in budgets) would be around 77 million dollars or 0,004% of the value managed.

A different but related economic consideration is that accepting a 70% chances to reach the 20% biomass target in 2035, States have also accepted de facto a 30% chance to fail by an undefined % margin) and an implicit but unassessed financial risk the order of magnitude of which is probably not insignificant. An implication is also that the rebuilding trajectory (e.g. the steepness of the rebuilding curve and hence the distribution of costs and benefits overtime) is as important, if not more, than the target figure adopted for 2035.

These calculations are more than simplistic and do not account for: (1) the eventual rebuilding costs for members, directly, e.g. in their catch reductions and foregone immediate benefits; (2) The management costs of the members themselves which bear the brunt of control and surveillance and research. The little information available indicates that there are substantial; (3) eventual changes in fishing costs as the stock rebuilds. This would depend on States and on their way to manage/allocate their quota share. If capacity is controlled there could be a significant pay off. If not, the increase profits might attract higher investments, at least partially offsetting them; (4) the investment strategy and in particular the relative allocation of funds to data collection, research, MCS, administration, communication, international collaboration, etc. Some thorny questions emerge such as (5) the nature of research (purely applied or basic, as running cost or as strategic investment); or (6) the inclusion or not of the non-market benefits of rebuilding (in less tangible ecosystem services than food provision, livelihoods, etc.). The improvements eventually produced in ERS stocks are very relevant in that respect; and finally (7) it might be important to distinguish private and public costs and investments (particularly in relation to benefits accruing respectively to the sector or to society as a whole.

PR-2014-60: Considering the values generated and the costs supported one might suspect that real "efficiency" might be made more by accelerating stock rebuilding than reducing administrative and research costs. As a consequence, considering that the CCSBT deals with one single species and few markets. It might be in a better position than other tuna RFMOs to consider undertaking at least a preliminary economic analysis of implications of its rebuilding strategy (taking into account, first, only market values) in order to shed some light on the economic implications of the parameters presently used for the Management Procedure and the planned rebuilding trajectory (still undefined).

4.6 Overall CCSBT Performance Review process

In this new section of the Performance Review report, we provide a first reflection on the process as reflected in the PR-2008 and PR-2014 reviews. We do so on the basis of the "guidelines" that emerged in the FAO review of performance reviews in RFMOs (Feo et al., 2012) that produced the following set of recommendations. For each of them, we provide a short statement of evidence:

1. Performance Review Panels: *Use a common approach and criteria but maintain flexibility:* The PR have used the Kobe criteria adapting their report to specific conditions by analyzing specific recommendations in relation to those criteria.
2. Budget: *Provide a reasonable and appropriate budget for the PR*. As far as we could judge (without really knowing what the budgets have really been) none of the SAs and PRs has expressed any disappointment with the means put at disposal.
3. Cooperation: *If needed call for cooperation with other RFMOs to enhance the PR*. While no particular facility was put in place by the CCSBT, the PR-2014 has explicitly called on staff of sister RFMOs (e.g. IOTC, IATTC) for complementary information, allowing comparisons of issues and solutions.
4. Role of the Secretariat: *Play a proactive role, as a resource and a participant in the PR*. The Secretariat has taken a very proactive role: (i) providing comments and updates on the SA-2008 and PR-2008 reports; (ii) calling for meetings of opportunity with the PR members; (iii) responding swiftly and providing additional information as requested; and (iii) facilitating interaction with independent chairs.
5. Role of Members: *Should be encouraged to provide views/comments on the PR*. The CCSBT members considered the PR-2008 report and acted on it, We assume that the same will happen at the 2014 CCSBT meeting at which the Chair of the 2014 PR Review Panel is invited to attend.
6. Role of other stakeholders: *Should be encouraged to provide views/comments on the PR*. We assume that the comment above applies and that other stakeholders, e.g., NGOs, will have opportunities to react at the next CCSBT meeting. They will also be able to react as the report will be posted on the CCSBT website.
7. Methodology: *Provide maximum opportunity for communication among the panel members, by one or more meetings and or through other means*. We were asked to work through email and phone (and Skype), probably to reduce costs. We found that process effective enough.

8. Timeframe: *Must be reasonable (commensurate to task) and priority should be given to overall efficiency of the process and effectiveness of the outcome*. The time frame given to us was satisfactory and allowed us to read the background information, compile the evidence available, look less available information, draft our respective sections, cross-check them, consult on sections of the report, react to comments, etc.
9. Transparency: *Maintain high standards of public availability regarding PR outcomes and reports*. We assume that our report, as the preceding PR review reports will be made available on the CCSBT website.
10. Responsiveness. This criterion is not in the FAO list mentioned above but is central to the evaluation: to what extent has the CCSBT taken into account the recommendations it has received from its SA and PR processes. The examination of the numerous recommendations in **Section 4** confirms a high degree of responsiveness. With minimal effort, some indicators could be developed, e.g. in % of recommendations agreed, and % for which implementation has: (i) started; (ii) progressed significantly; and (iii) been completed. The information might also be represented in a traffic light system.

PR-2014-61: Based on the above elements of evidence, it appears that the CCSBT has satisfactorily fulfilled the criteria established for the RFMOs Performance Review process.

In a Performance Review, it is not always easy to track all recommendations and their dynamic evolution as they are partly implemented or evolve into more specific ones.

PR-2014-62: If not available yet, It would be useful and in line with best administration practices, to keep a formal record of all recommendations with related metadata (date, subject, achievements, current status, etc.). It is therefore recommended to keep such a formal central repository of the recommendations emanating from the EC and ESC, and also from working groups or other processes.

This tool would be very useful to the Commission to keep track of its own work and assess more easily and more transparently its performance. It would also help assessing the Strategic Plan implementation performance.

PR-2014-63: The fact that the Strategic Plan is structured along the main Kobe Criteria mean that sooner rather than later, the Performance Review could become an integral part of the Strategic Plan implementation and the Recommendation Repository an important part of the implementation dashboard.

5. CONCLUSIONS ON THE EXTENT TO WHICH THE CCSBT HAS MET INTERNATIONAL STANDARDS

In this section, we will first examine the definition of "standards" and the different sources of such "standards" (intergovernmental or private) and "best practices" before assessing CCSBT performance against them.

5.1 Definitions and sources of standards

5.1.1 Definitions

The TORs of the PR-2014 call for an assessment of: (1*) the CCSBT performance in complying with the Kobe I criteria; and (2) the* extent *to which modern fisheries management standards have been incorporated into the CCSBT's decisions.* These two elements overlap significantly as the Kobe criteria are considered as a tailored expression, for tuna RFMOs, of more generally agreed modern fisheries management "standards."

A standard is usually defined as *a level or degree of quality that is considered proper or acceptable; A moral rule that should be obeyed*[38]*.* The Marine Stewardship Council (MSC) specifies in its standard-setting procedures that a "standard" is: *a document that provides, for common and repeated use, rules, guidelines or characteristic for products or related processes and production methods, with which compliance is not mandatory* (MSC, 2013). The Chatham House document on RFMO performance (Lodge et al. 2007) refers instead to "best practices" and it is in that sense that we will use the term standard (referred to in our TORs) in that report.

A standard or a best practice can be said to be international when they are agreed by an international institution and/or established in an international legal instrument. In the language used in tuna RFMOs, the term "standards" seem to have been applied to a range of items including: (i) hard legal norms (such as MSY); (ii) generally agreed approaches and best practices such as good governance or implementation of precautionary and ecosystem approaches; addressing bycatch; transparency and promoting participation by observers; maintaining positive and negative lists of vessels; adoption of certain MCS tools; (iii) use of best available technologies (e.g. VMS); and (iv) scientific methods/models (e.g. Management procedures and MSE). In the following sections, we will look at the extent to which the CCSBT has effectively used these objects in fulfilling its functions.

5.1.2 Intergovernmental sources

The principles and requirements for responsible fisheries and their management are established in soft and hard law instruments such as:

1. The 1982 LOSC which establishes MSY as a standard for development and management and a minimum standard for stock rebuilding;
2. The 1992 CBD for the Ecosystem Approach to sustainable use. Its "standards" are particularly relevant when broadening the agenda of RFMOs to better cover the ERS;

[38] Cambridge Dictionaries Online. The verb "ought to" would probably be more appropriate for a "moral rule".

3. The 1993 FAO Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas (Compliance Agreement) which intends to improve the performance of flag States in the control of their vessels fishing in the high seas;
4. The 1995 UN Fish Stock Agreement (UNFSA), which strengthens the arm of RFMOs in their fight against IUU by prescribing that all States, members and non-members of RFMOs alike, if fishing for fisheries resources covered by an RFMO, must become members of the RFMO or agree to abide by the conservation and management measures established by the organization. It introduces the precautionary and ecosystem approaches to fisheries management and establishes MSY as a limit for development (not as a target) and as a minimum rebuilding target;
5. The 1995 FAO Code of Conduct for Responsible Fisheries, with its international and technical guidelines and Plans of Action (e.g. on conservation and management of sharks to reduce incidental catch of seabirds, to prevent, deter and eliminate IUU fishing, etc.), which integrate all legal instruments and provide implementation guidance.
6. The 2009 FAO Agreement on Port States Measures to Deter, Prevent and Eliminate Illegal, Unreported and Unregulated (IUU) Fishing (the Port States Agreement)
7. The specific standards adopted by other RFMOs, most likely aligned on international legal instruments mentioned above but with their own particular settings (e.g. strategic and tactical reference limits and targets).
8. The formal outcomes of the UNCED, WSSD, Rio+20 and other cross-sectoral UN summits.
9. The annual UNGA resolutions on oceans and fisheries.

5.1.3 Marine Stewardship Council (MSC)

The ecolabelling process of the MSC rests on three main Principles (see below) and related criteria and performance indicators (**Figure 1**):

- PRINCIPLE 1: A fishery must be conducted in a manner that does not lead to over-fishing or depletion of the exploited populations and, for those populations that are depleted, the fishery must be conducted in a manner that demonstrably leads to their recovery;
- PRINCIPLE 2: Fishing operations should allow for the maintenance of the structure, productivity, function and diversity of the ecosystem (including habitat and associated dependent and ecologically related species) on which the fishery depends;
- PRINCIPLE 3: The fishery is subject to an effective management system that respects local, national and international laws and standards and incorporates institutional and operational frameworks that require use of the resource to be responsible and sustainable.

The principles relate to the target stock, the ERS and the management system. Each criteria and sub-criteria are underpinned by a number of more detailed performance

indicators allowing an assessment of the extent to which the fishery could be labelled and/or of the areas in which efforts would be needed to obtain that ecolabel. They reflect some international best-practices adopted by an important globally recognized certification scheme and in that sense they are also “standards”. Practically all of these parameters are considered under the Kobe Criteria to some degree. In the MSC approach, however, more significant attention is placed on Ecologically-Related Species (ERS), Endangered, Threatened and Protected species (ETPS) (not mentioned in the Kobe criteria), use rights, harvest control rules and reference points, and the precautionary approach. There are therefore differences in emphasis more than in intent or content.

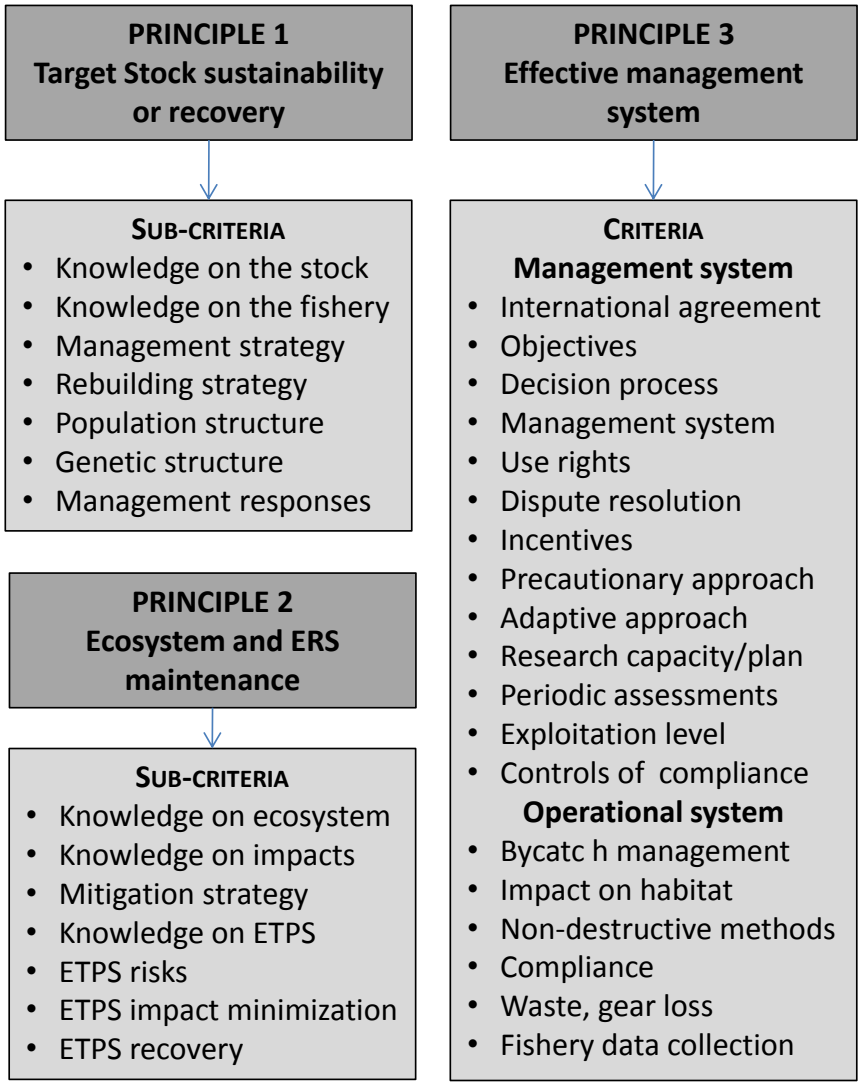


Figure 1: Principles and criteria used by the Marine Stewardship Council for ecolabelling. Simplified from MSC (2014).

5.1.4 Other sources

We refer here to standards listed by academics or independent groups of experts without formal intergovernmental legitimacy, although some, like the Chatham House Report, have been endorsed by some governments in intergovernmental meetings, such as at the United Nations. Such compilations have been produced, for example by Mooney-Seus and Rosenberg (2007; 2007a), Lodge (2007) and Lodge et al. (2007) in the Chatham House framework. They rely heavily on the intergovernmental sources listed above but may also sometimes go beyond them. The latter reference (Lodge et al,., 2007) is particularly interesting and comprehensive, and it contains some elements of liberal economics reasoning (and market-based measures) which are based on best practices at national level but have rarely (if at all) agreed in any RFMO.

The Chatham House Report presents "standards" (in reality, elements considered as reflecting best practices), grouped by categories: (i) General Practices; (ii) Conservation and management; Allocation; (iii) Compliance and enforcement; (iv) Decision making in general matters, budget and administration, and substantial issues; (v) Dispute settlement; (vi) Transparency; (vii) Developing countries requirements; and (viii) institutional practice. In total, 125 elements of "best practices" are considered (eliminating alternatives and elements of little or no relevance for CCSBT).

5.2 Assessment of CCSBT performance

5.2.1 Assessment against international criteria (the Kobe criteria)

In **Section 4**, we have undertaken a qualitative assessment of the extent to which the CCSBT has implemented the different recommendations elaborated through its own self-evaluation and independent review, explicitly related to the Kobe criteria. This "externally validated internal audit" provides a qualitative judgement on the CCSBT decision-making and implementation process. As all self-assessments, it carries the risk of complacency, but that risk is limited by the adoption of an internationally agreed and evolving performance assessment framework (the Kobe framework) and the review of that self-assessment by an independent reviewer.

We have therefore decided to elaborate a more synoptic representation of the extent to which the CCSBT has implemented the Kobe criteria, identifying key decisions and behaviour that indicate, explicitly or implicitly, the degree of conformance with a particular "standard". There are difficulties, however:

1. The Kobe criteria are rather generic and qualitative and give no indicators, no scale, and no reference levels (e.g. "minimal" standards; targets, limits) on the basis of which to assess "*the extent to which*" a particular standard has been met;
2. Assessing conformance with any Kobe criteria (primary criteria) requires examining a number of secondary criteria. For example, to check the level of implementation of the data collection and sharing criteria, one needs to look at how data on the target species and ERS are collected, what are the agreed data categories and

standards for collection, storage, management, transmission; timeliness; validation procedures; confidentiality; availability to scientific groups and the public, etc[39].

3. Ideally, in order to be able to re-aggregate the sub-scores to the primary criteria level, each of the secondary criteria should be accompanied by indicators with optimal targets and minimal requirements which, at present, are not generally available. These parameters may be agreed internally or at international level (e.g. among RFMOs). In this PR as well as in the SA-2008 and PR-2008 the performance at the secondary criteria level is (qualitatively) judged by the extent to which the CCSBT implements its own recommendations that address some of these elements. There is no guarantee, however, that the list of these secondary-level recommendations, made at a point in time, are exhaustive enough to fully meet the higher-level criteria.

Using the Kobe criteria listed in **Section 4** as categories and the subject of the recommendations made under each criterion as sub-categories (eliminating redundancies), we developed a matrix for the period 1994-2014 (**Table 2**). Using the timeline of main events and decisions provided by the CCSBT Secretariat in the SA-2008 report, we qualitatively assessed the progress made in relation to each sub-criterion, from no-implementation to basic, improving, and advanced implementation. In **Table 2**, for each year the assessment level is coded by a colour (from red to dark green; grey when no data is available) and a value (from 0 to 3, no data is set at 0). The average score for each year across all criteria has been calculated as the simple arithmetic mean of all the scores (**Figure 2**).

A simple look at **Table 2** shows the progressive improvement in the implementation of the various components as the majority of the cells shift from red/yellow to green. Similar progress is observed across all Kobe criteria illustrating the coherence of the effort.

[39] The difficulties can be illustrated by the assessment of the RFMOs performance in relations to ERS (bycatch strategy) made by Gilman et al. (2013) looking at 13 sub-criteria before expressing RFMOs performance

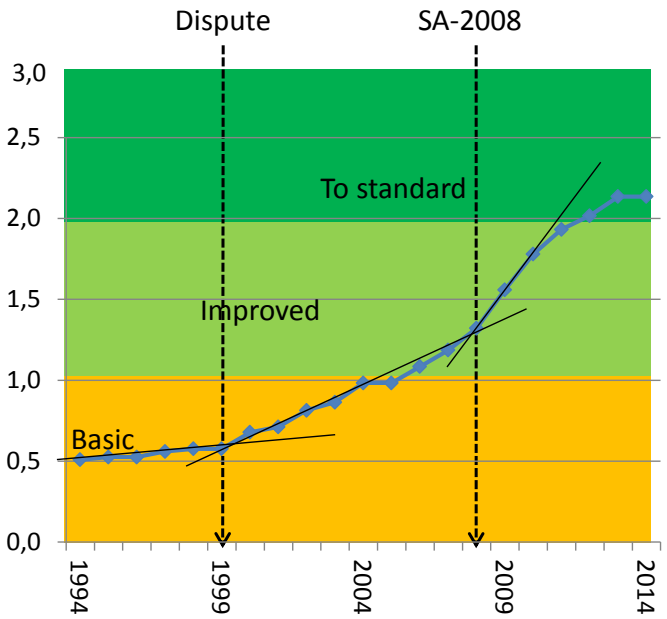


Figure 2: Evolution of the mean performance of CCSBT in reference to modern tuna RFMOs governance standards (1994-2014). Trend lines fitted by eye.

Figure 2 represents that same progression through a single trajectory of the mean implementation level. It shows the steady progression from basic to advanced implementation. It also indicates an apparent acceleration of progress after the historical dispute in 1998-99 (Japan vs New-Zealand and Australia; Hayashi, 2000) and after the first self-assessment performance review, in 2008. These may not be coincidental. It is not clear whether the "stagnation observed since Kobe III, in 2011, reflects only the "noise" in the evolution, "innovation fatigue," or because there has not been sufficient time for the full implementation of new CCSBT measures that were adopted in the last 1-2 years. The next independent PR, if maintained, would be in a better position to examine that point.

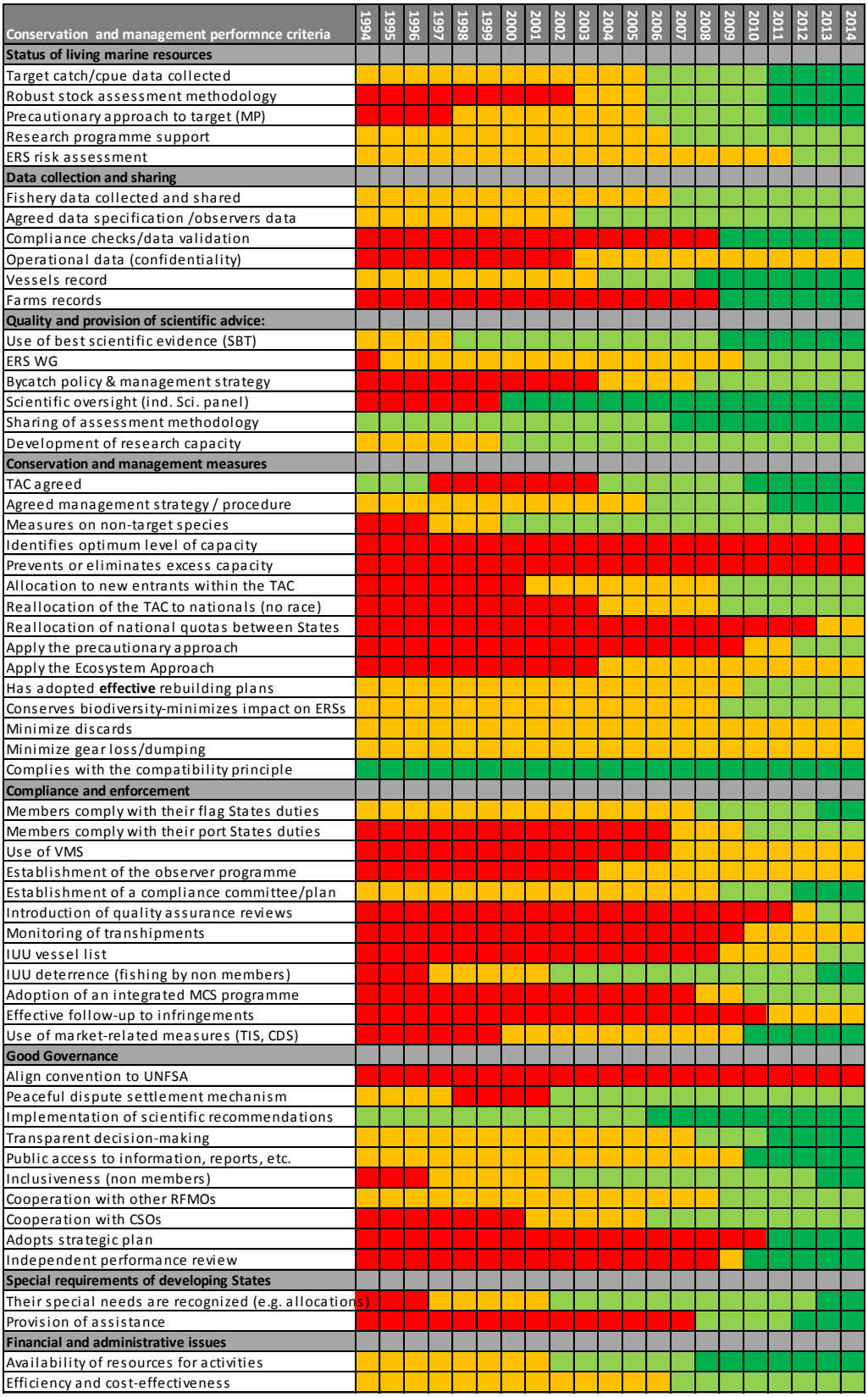


Table 2: Conservation and management performance criteria of the CCSBT since its establishment (1994-2014). Performance is coded as: Nil (red); Basic (yellow), Improving (light green) or advanced (dark green)

5.2.2 Assessment against the MSC criteria

A detailed assessment of the CCSBT performance against the MSC criteria is a much more demanding task beyond the TORs of this PR Panel. We decided therefore to simply express our opinion, after the detailed analysis against the Kobe Criteria, in relation to the three MCS Principles.

Considering the MSC principles, criteria and performance indicators in correspondence to the Kobe Criteria, The assessment of the CCSBT performance from an MSC perspective would appear as:

- Bad against Principle 1 as its target stock – already depleted in 1994 - remains depleted and the recovery strategy has not yet changed the situation;
- Insufficient in relation to Principle 2 as the efforts towards managing ERS are still very limited and not showing signs of acceleration, despite ongoing cooperation with other relevant international institutions;
- Good in relation to Principle 3 as its management system (data collection and exchange, science, elaboration of advice, decision-making, compliance and evaluation of performance) on which significant improvements have been made, particularly in the last 5-6 years.

5.2.3 Assessment against the Chatham House best practices

For each of the Chatham House categories (listed in Lodge et al., 2007 and in Annex 4), we have noted the total number of relevant elements (criteria) of best practices and for each of them the degree of implementation by CCSBT. We have attributed a score of 0 when no action has been taken, 0.5 when implementation has started (or the element is complex and only part of it is implemented) and 1 when the element can be considered as fulfilled. Finally, the percentage of implementation of each category has been calculated. No weighting of any sort has been applied, within a category or between them. Criteria considered as irrelevant for the species/RFMO concerned were not considered (they are shaded in grey in Annex 4). The result is represented in **Table 3** and **Figure 3.**

In the report section on effectiveness and efficiency of the CCSBT (**Section 4.5.2**) we have stressed that the effectiveness of an RFMO may be appreciated in terms of the quality of its system (structure, mechanisms, processes, rules, and formal outputs, data, reports, etc.) or/and in terms of its outcomes. This simple semi-quantitative analysis refers only to the system and not to its outcome (e.g. in terms of state of stocks). The overall score obtained is about 76% and is probably in the top range of the tRFMOs for organizational performance even though we are not aware of comparable analyses.

The CCSBT scores appear particularly low in two categories of criteria: decision-making and special consideration of developing countries. The score is rather low on decision-making simply because the CCSBT takes its decision by consensus voting and, as a consequence, does not have an objection procedure. The low score in relation to developing members or CNMs reflects a lack of formal provisions to account for the difficulties these countries may encounter when trying to meet CCSBT requirements (although *ad hoc* action to assist them has been taken).

Table 3: Semi-quantitative assessment of the CCSBT performance in relation to the Chatham House best practices for RFMOs. See text.

CATEGORIES	N° of criteria	Score achieved	% achieved
General practice	10,0	8,5	85,0
Conservation/management	33,0	23,5	71,2
Allocation	8,0	6,5	81,3
Compliance / Enforcement	12,0	8,5	70,8
Decision-making/General	7,0	7,0	100,0
Decision-making/budget& Admin.	3,0	0,5	16,7
Decision-making /Substantial issues	7,0	3,0	42,9
Decision-Making/Total	18,0	10,5	58,3
Dispute settlement	12,0	11,0	91,7
Transparency	8,0	7,0	87,5
Dev. Countries requirements	7,0	2,5	35,7
Institutional practice	13,0	13,0	100,0
TOTAL	120,0	91,0	75,8

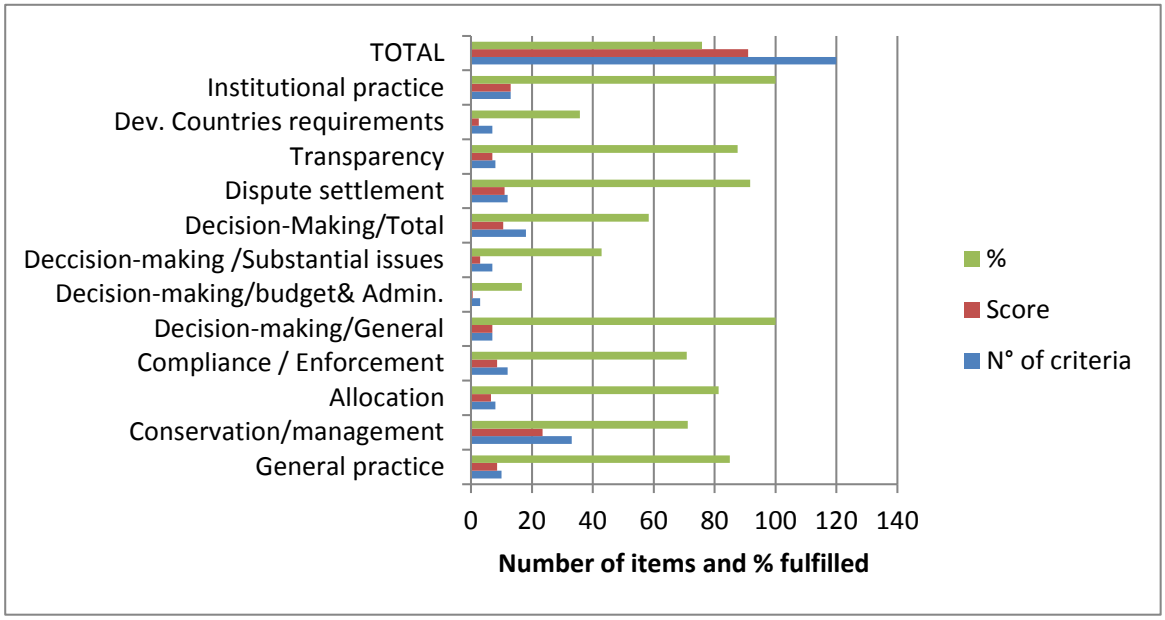


Figure 3: CCSBT performance in relation to Recommended Best Practices for RFMOs (taken from Lodge et al., 2007)

In addition, the results are to be taken with a grain of salt. The CCSBT score is high in dispute settlement, for example, while the CCSBT history has shown how inefficient it has been in practice when a serious conflict really emerged about the central matters of the state of stocks and advisable TACs and allocations..

The Chatham House best practices are strongly influenced by the UNFSA and it could be expected that a better alignment of the CCSBT basic texts with the international Instrument would help improve various scores.

5.3 Discussion

5.3.1 The performance reference scale

The three assessments provided above give a coherent picture of the performance of the CCSBT from different perspectives. The shallow reference to the MSC standards and the semi-quantitative reference to the Chatham House best practices give a snapshot of the present situation of CCSBT when referred to modern standards that complement and support the Kobe Criteria. The analysis of the trajectory of the CCSBT infrastructure from 1994 to today offers a more dynamic view of the progress made, by necessity, against the same modern standards. One could argue, for example, that it is not fair to score as nil the CCSBT performance in relation to VMS at a time when the technology did not even exist. Or to score it against UNFSA-derived Kobe principles at a time these were not yet agreed. The fact is that:

1. A scoring against a continuously sliding scale of moving standards is practically impossible and of little use.
2. The present scoring measures, in reality, approximately the progress of CCSBT towards modern standards as they increased in complexity and the institution correspondingly developed to match them. To some extent, the trajectory reflects a co-evolution.

The important message this PR Report draws from the synoptic analyses against the Kobe criteria and the Chatham House best practices, and the positive trajectory identified in these analyses, is that the CCSBT has effectively responded to recommendations for improvement and has, and continues to, adapt to the evolving landscape of modern international standards for RFMO governance and fisheries management.

5.3.2 The overall performance of the CCSBT

It is clear that the situation that prevailed in many aspects of the CCSBT functioning before 1999 is being corrected and that the CCSBT score has increased as more and more demanding standards were adopted. However, the performance of the CCSBT is measured on two grounds:

1. The management system with its structures, processes and procedures, policies, strategies, plans, modus operandi (e.g., transparency, participation) and measures put in place, the means mobilized for implementation, and its capacity to adjust to changing environments; and
2. The state of its resources and ecosystem: the outcome of the activity of the management system: the well-being of the resources and their ecosystem.

The state of the industry and of the communities, the fleets' viability and the people's livelihoods, which are certainly central for the Members, are criteria that bear little explicit weight in the debates and in the assessment of performance in any RFMO. This is understandable considering the complexity of the matter but regrettable considering its huge impact on the actor's behavior. The CCSBT is no exception but its Strategic Plan (**Section 6.3**) refers to Maximum Economic Yield (MEY), maximization of profits, differentiated Members' strategies to achieve the goals, and distribution of stock-rebuilding benefits. This provides an original framework for the future developments in relation to which the CCSBT will need to innovate and deliver.

In the CCSBT, the detailed recommendation elaborated by the Kobe II WGs, the ESC reports, our own recommendations, and the conclusions above indicate that there has been progress and there is room for more of it in the management system, for example on ERS and the Ecosystem Approach; observer coverage; access to operational data; MCS tools (e.g. a regional observer program; adoption by the CCSBT of its own high seas boarding and inspection and other MCS tools); developing country assistance and cross-RFMOs collaboration. Some areas such as the future impact of climate change and economic implications of management policies and strategies are still poorly developed or simply not considered (this is also the case in most RFMOs).

Regarding the state of the resources, the Commission had to deal from the onset with a collapsing stock. Following its establishment, its Members (and their fleets) have then misbehaving, underestimating or misreporting or concealing their true catches, corrupting therefore the scientific analyses and advice and de facto impeding any recovery as well as significantly poisoning the political atmosphere of the Commission and its ability to take cooperative decisions for a number of years. The decisions made in the last decade indicate that Monitoring, Control & Surveillance as well as Members' compliance have become priority concerns in the CCSBT. The continuous decline in biomass that had been going on since the 1950s have apparently been stopped since the establishment of the Commission- even if short of total collapse- even though the stock has not (yet?) given any strong sign of recovery. The significant improvement in the Organization's structure, processes and means were a necessary condition to stock rebuilding but cooperation by Nature is essential to obtain the expected outcome. With its small biomass (6% of their virgin biomass and 25% of their biomass at MSY) and a truncated demographic structure, the stock is left with little resilience to any major multiple-year climatic event, and *a fortiori* to climate change. The horizon remains rather dark and the SBT being a long-lived species, any significant recovery may take decades.

One thing the CCSBT could still do after having invested so much into the institution's capacity to act would be to invest as much as possible into the natural capital itself, taking the opportunity of any natural positive oscillation to build-up the stock instead of the TAC. The Management Procedure, to some extent, already accounts for natural oscillations as reflected in past data. Exceptionally bad situations (out of the MP bounds) would require emergency measures (reducing the TAC) but exceptionally good years could be used to invest in natural capital, not increasing the TAC. That measure should be seen as an investment, not as a cost.

The 1992 CBD and the 1995 UNFSA, as well as the Kobe criteria imply a broadening of the RFMOs agenda to better consider the Ecologically-Related Species (ERS), Endangered, Threatened and Protected species (ETPs), critical habitats, and the

ecosystem. They have reflected the new societal expectations regarding fishery management and conservation opening a gap between these and the formal RFMO mandates "frozen" within their formal agreement. The changes in attitude and action call for:

- Reduced tolerance (complacency) in relation to the level of depletion of the target species.
- Increased requirement for compliance with UNCLOS provisions regarding associated and dependent species. Increased interaction with IUCN, CITES, CBD and eNGOs;
- New standards, as in the Ecosystem Approach (CBD, 1992, FAO 2003), to maintain the structure and function of the broader ecosystem;
- A wider and more decisive application of the Precautionary Approach (UNCED 1992) as provided under the FAO to Precautionary Approach to Fisheries (PAF); and
- A greater emphasis on transparency and traceability to ensure compliance with agreed measures, and to combat IUU fishing and to prevent IUU product from entering major markets.

The overcapacity issue will continue to "poison" the playing field of tuna RFMOs if not resolved. Overcapacity leads to pressures on government representatives to seek to maintain or improve fishing opportunities for their own fleets on stocks already approaching, at, or beyond full exploitation, at risk of unfavorable climatic events or when facing the needs of new entrants. This pressure has arguably been a significant cause of failure in tuna RFMOs in the past. Better fleet controls put in place in the last decade, the identification of specific national quotas, the attention given to compliance with intra-national allocation are all good steps. However, because of past overcapacity and continuous technical progress as well as raising fish prices, the attention given to this issue must be flawless. The extent of overcapacity is not yet known. In CCSBT a self-assessment by Members of national capacity levels is ongoing. The fact that the CCSBT is interchanging vessels with its neighbor tRFMOs is a real issue the solution to which requires some more effort by the CCSBT and better regional cooperation.

The CCSBT has obviously made some considerable strides in improving its performance against both the 2008 Performance Review recommendations and the emerging standards of modern fisheries management. However, as this PR Report notes, there are a number of areas in which the CCSBT needs to improve, and the fact remains that the SBT stock continues to be in deleterious condition and economic pressures continue to hamper international cooperation. The international community, the market and consumers are demanding more, as noted above, and RFMOS and flag States are increasingly being asked to provide proof of sustainable fisheries that respect the wider marine ecosystem, operate legally, and safeguard the wellbeing of those that work in the fisheries sector. The CCSBT has a small number of Parties, including six of the most developed nations or economic entities on the planet. It is entrusted with the management of a single, highly valuable stock, and has, compared to other tuna RFMOs, a relatively smaller number of vessels to monitor[40]. These conditions are unique among the tuna RFMOs, and should

[40] The CCSBT has to deal with approximately 2000 fishing vessels and carriers combined when the WCPFC Authorized Vessel Record has over 6000 vessels.

provide few obstacles for the CCSBT to both succeed in adopting modernized measures (which it is doing) but also effectively implement them such that the SBT stock recovers within our lifetimes.

Last but not least, the CCSBT has adopted a Strategic Plan in 2011. The structure of the Plan, the goals, the strategies to achieve them and the activities foreseen represent a most comprehensive instrument to plan the actions needed to meet its medium and long-term challenges. The Strategic Plan reflects quite accurately the Recommendations of the first Performance Review and the Kobe Criteria. It anticipated a lot if not all of our present recommendations, few of which should then come as a surprise to CCSBT members. The Strategic Plan it therefore geared to meet the best international standards and practices. The functional connection between Performance Reviews and the Strategic Plan is even explicitly mentioned in the Plan itself (**Section 7.3**).

The authors sincerely hope this report will contribute to the CCSBT effort, and that the parties and CNMs will succeed in giving effect to the good intentions expressed in the Strategic Plan, for the sustainable use and conservation of the SBT, its ecosystem and its fisheries.

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ANNEX 1: TERMS OF REFERENCE OF THE PERFORMANCE REVIEW PANEL

The performance review will be conducted by an independent review panel, consisting of a Chair (leader) and one or two other experts[41]. The review will evaluate the:

- Performance of the CCSBT using the agreed criteria from Kobe I at Annex 1[42];
- CCSBT's progress in implementing the recommendations from the Performance Review as documented in the Report of the Performance Review Working Group and the Report of the Independent Expert on the Performance Review; and
- Extent to which modern fisheries management standards have been incorporated into the CCSBT's decisions.

The resources to be provided to the Performance Review Panel include:

- The Report of the Performance Review Working Group (2008)
- The Report of the Independent Expert (David Balton) on the Performance Review (2008)
- "Marked-up" versions of both of the above reports that identify decisions, changes and progress made against recommendations in these reports –
  - the "marked-up" versions will be prepared by the Secretariat and will be circulated to Members for amendment and additions prior to being provided to the Panel,
  - these are likely to be the most important resources available to the panel and they should allow the panel to quickly determine progress since the previous review;
- All other publicly available CCSBT meeting reports, documents and data requested by the Panel; and
- Access[43] to Secretariat staff, independent Chairs (including Compliance Committee, Extended Scientific Committee and Ecologically Related Species Working Group) and Members to respond to questions from the panel.

The final report of the Performance Review Panel should be a concise document that:

- Describes the steps taken to conduct the review (e.g. documents examined, individuals that were consulted etc.);
- Presents the findings of the review; and
- Provides recommendations from the Panel for the CCSBT on how to improve its performance with respect to the review criteria and modern standards of fisheries management.

The report should avoid unnecessary duplication of background information that exists in the marked-up version of the 2008 Report of the Performance Review Working Group. However, in evaluating each criterion in Annex 1, the report should describe the current situation in the CCSBT on which each evaluation was based.

[41] Unless Members agree during the selection process that the review can be performed by a single candidate if no other suitable candidates agree to conduct the review.
[42] These criteria were developed following the first joint meeting of tuna RFMOs (Kobe 1) and have been adopted for use in reviews by the tuna RFMOs, including the 2008 review of the CCSBT.
[43] By email, telephone, and direct person to person contact where this is practical and cost effective.

The final report should be provided to the Secretariat in English at least 8 weeks prior to CCSBT 21. The Secretariat will translate the report into Japanese and aim to have both language versions of the report circulated to Members four weeks prior to the commencement of the annual meeting.

The Chair of the performance review panel will present the report to the annual meeting and respond to questions from Members concerning the report. The report will be published on the public area of the CCSBT's website after CCSBT 21.

ANNEX 2: PERFORMANCE REQUIREMENTS FOR TUNA RFMOS STEMMING FROM THE KOBE 1, 2 AND 3 PROCESSES AND RELATED WORKING GROUPS

The first joint meeting of tuna RFMOs (Kobe I, Kobe, Japan, 2007) agreed on *Course of Actions*. The second meeting (Kobe II, San Sebastian, Spain, 2009) considered the progress made in implementing the *Course of Actions* and added recommendations, including for the organization of four specific working groups on: (i) scientific advice (SAWG, Barcelona, 2010); Monitoring, control and surveillance (MCSWG, Barcelona, 2010); bycatch (BCWG, Brisbane 2010) and tuna fisheries management (TMWG, Brisbane 2010). The third meeting (Kobe III, La Jolla, USA, 2011) emphasized the need for concrete and achievable actions and added recommendations in key areas of by-catch, coordinated scientific efforts, reduced capacity, decision-making guidelines, and compliance and enforcement.

1. CONSERVATION AND MANAGEMENT

In the sections below, we will separate the guidance related to the target resources managed by RFMOs under their core mandate and the ERS species their fisheries impact, essentially through bycatch

a) Status and trends of the target living marine resources: The extent to which RFMOs…

- *Asses the status and trends of major fish stocks under the purview of the RFMO in relation to maximum sustainable yield or other relevant biological standards (KI);*

b) Status and trends of the Ecologically Related Species (ERS)

- *Assess the status and trends of species that belong to the same ecosystems as, or are associated with or dependent upon, the major target stocks ("non-target species or ERS) (KI);*

Improving assessment of bycatch

- *Assess the status and trends of sharks (KI.I.11; KII.1f; KIII.5.b.d).*
- *Assess the impact of the SBT fishery on bycatch by taxon using the best available data.* ***BCWG-2010***
- *Consider adopting standards for collection of bycatch data which, at a minimum, allows the assessment of: (i) the status of bycatch species population: (ii) the effectiveness of bycatch measures and; (iii) the level of interaction of the fishery with bycatch species.* ***BCWG-2010***
- *Encourage the participation of scientists in relevant working groups to assess bycatch populations and propose mitigation strategies* ***BCWG-2010***
- *Implement/enhance observer and port sampling programs with sufficient coverage to quantify/estimate bycatch*
- *Require timely reporting [of bycatch information]to inform mitigation needs and support conservation and management objectives, addressing practical and financial constraints* ***BCWG-2010***

Improving ways to mitigate/reduce bycatch within T-RFMO

- *Ensure that measures reflect 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.****BCWG-2010***
- *Adopt immediate and effective management measures for bycatch populations of concern (incl. depleted), such as prohibition (as appropriate) of retention where alternative effective sustainability measures are not in place.* ***BCWG-2010***
- *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* ***BCWG-2010***

- *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; and* ***BCWG-2010***
- *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.* ***BCWG-2010***
- *Expedite action on reducing bycatch of threatened and endangered species in accordance with priorities in the RFMO areas* ***BCWG-2010***
- *Adopt the following principles as reflecting best practice on bycatch avoidance and mitigation measures and on bycatch conservation and management measure: (1) binding, (2) clear and direct, (3) measureable, (4) science-based, (5) ecosystem-based, (6) ecologically efficient (reduces the mortality of bycatch), (7) practical and safe, (8) economically efficient, (9) holistic, (10) collaboratively developed with industry and stakeholders, and (11) fully implemented.* ***BCWG-2010***

Improving cooperation and coordination across RFMOs

- *As a matter of priority, establish a joint T-RFMO technical working group to promote greater cooperation and coordination among RFMOs in matters related to bycatch. Encouraged and expedite the formation of the joint working group.* ***BCWG-2010***
- *Actively develop collaborations between 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; and* ***BCWG-2010***
- *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* ***BCWG-2010***
- *Report progress to Kobe III on the formation and on progress against these recommendations* ***BCWG-2010***

Capacity building for developing countries

- *Implement capacity building programs for developing countries to assist in their implementation of Kobe I, 2 and 3 recommendations on bycatch reduction and mitigation.****BCWG-2010***

c) Data collection and sharing: The extent to which the RFMO …

- *Agreed on formats, specifications and timeframes for data submission, taking into account UNFSA Annex I (KI.I.1), for scientific and compliance purposes. Adopted Standardized report cards on data submission to track Parties' compliance with their obligations (KIII, Annex 3, 1.1);*
- *Members and cooperating non-members, individually or through the RFMO, collect and share complete and accurate fisheries data concerning target stocks and non-target species and other relevant data in a timely manner (KI);*
- *Gather data on fishing and fishing vessels and share them among members and RFMOs (KI);*
- *Address gaps in the collection and sharing of data as required (KI);*
- *Have developed data confidentiality rules and related data exchange protocols (KIII, Annex 3, 1.1);*
- *Routinely collect data by year on catch, effort and sizes (****SAWG-2010****)*
- *Give top priority to the timely provision of good quality data, following mandatory data requirements, to facilitate assessment and provision of scientific advice based on the most recent information.* ***(SAWG-2010)***
- *Reduce lags in fishery data submission, making a full use of communication technologies (e.g. web-based)* ***(SAWG-2010)***

- *Harmonize basic data formats are harmonized.* ***(SAWG-2010)***
- *Make the basic data used in stock assessment (catch, effort and sizes by flag and time/area strata) available via the websites or other means.* ***(SAWG-2010)***
- *Make the fine scale operational data available in a timely manner to support stock assessment work****(SAWG-2010)***
- *Address confidentiality concerns through rules and procedures for access protection and data security* ***(SAWG-2010)***
- *Ensure adequate sampling for catch, effort and size composition across all fleets and especially distant water longliners for which this information is becoming limited.* ***(SAWG-2010)***
- *Cooperate with other RFMOs 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.* ***(SAWG-2010)***
- *Routinely validate the information reported by Parties and estimate catches from non-reporting fleets using alternative [fishery-independent] sources of data, notably observer and cannery data* ***(SAWG-2010)***

d) Quality and provision of scientific advice: The extent to which the RFMO…

- *Receives and/or produces the best scientific advice relevant to the fish stocks and other living marine resources under its purview, as well as to the effects of fishing on the marine environment (KI)*
- *The best available scientific advice clearly articulate risk and uncertainty to decision-makers (KII.1.e);*
- *Has developed methods to quantify uncertainty and reflect it in risk assessment (KIII. p4; KIII Annex 3,1.2);*
- *Has contributed to the Creation and function of the joint Technical WG on Management Strategy Evaluation (KIII, Annex 3, 1.3)*

Biological data Barcelona

- *Develop regular large scale tagging programs along with appropriate reporting systems, to estimate natural mortality growth and movement patterns by sex, as well as other fundamental parameters for stock assessments.* ***(SAWG-2010)***
- *Undertake archival tagging as an ongoing activity of tagging programs as it provides additional insights into tuna behavior and vulnerability.* ***(SAWG-2010)***
- *Encourage the study of spatial aspects of assessment to substantiate spatial management measures.* ***(SAWG-2010)***
- *Encourage the use of high-resolution spatial ecosystem modeling frameworks since they offer the opportunity to better integrate biological features of tuna stocks and their environment.* ***(SAWG-2010)***

Stock assessment

- *Promote peer reviews of stock assessment works.* ***(SAWG-2010)***
- *Use more than one stock assessment model and avoid the use of assumption-rich models in data-poor situations.* ***(SAWG-2010)***
- *Develop checklists and minimum standards for stock assessments with other RFMOs* ***(SAWG-2010)***

e) Adoption of conservation and management measures: The extent to which the RFMO …

- *Has adopted conservation and management measures for both target stocks and non-target species that ensures the long-term sustainability of such stocks and species and are based on the best scientific evidence available (KI.I.4);*
- *Has applied the precautionary approach as set forth in UNFSA Article 6 and the Code of Conduct for Responsible Fisheries Article 7.5, including the application of precautionary reference points (KI.I.4; KI.I.10);*

- *Has contributed to a Joint Technical WG on Management Strategy Evaluation (MSE) to facilitate the implementation the PA (KIII, p.4 and Annex 3, 1.3);*
- *Has applied the Ecosystem Approach to Fisheries to manage bycatch of target and non-target species (KI.I.4; KI.I.10);*
- *Has minimized the impact of fishing on HMSs and ERSs (particularly turtles, seabirds and sharks) (KI.I.10; KI.I.11). Has assessed and managed sharks (KI.I.11; KII.1f; KIII.5.b.d).*
- *Has adopted and is implementing effective rebuilding plans for depleted or overfished stocks (KI.I.4);*
- *Has moved toward the adoption of conservation and management measures for previously unregulated fisheries, including new and exploratory fisheries (KI);*
- *Has taken due account of the need to conserve marine biological diversity and minimize harmful impacts of fisheries on living marine resources and marine ecosystems.*
- *Has adopted measures to minimize pollution, waste, discards, catch by lost or abandoned gear, catch of non-target species, both fish and non-fish species, and impacts on associated or dependent species, in particular endangered species, through measures including, to the extent practicable, the development and use of selective, environmentally safe and cost-effective fishing gear and techniques (KI).*
- *Has required the use of on-board observers to collect discards data (KIII.5.b.a);*
- *Has increased attention on seabirds, turtles and mammals (KIII.5.b.f);*
- *Has undertaken R&D work to reduce by-catch of juveniles tuna (FADs) (KI.I.12);*
- *Has considered bycatch by recreational fisheries (KIII.b.e):*

f) Capacity management: The extent to which the RFMO…

- *Has identified fishing capacity levels commensurate with long-term sustainability and optimum utilization of relevant fisheries allowing for legitimate development (KI.I.3: KII.1a);*
- *Annually assesses capacity and its allocation (KIII, p.5-6);*
- *Has taken actions to prevent or eliminate excess fishing capacity and effort (KI);*
- *Developed members States have frozen their large scale purse seine capacity and reduced and transfered capacity (KIII, p.6), paying attention to the problem of transfer of capacity between/within RFMOs (KII.1b; KIII, p.6);*

g) Compatibility of management measures: The extent to which the RFMO…

- *Has adopted compatible measures as reflected in UNFSA Article 7 (KI).*

h) Fishing allocations and opportunities: The extent to which the RFMO has…

- *Agreed on the allocation of allowable catch or levels of fishing effort, taking into account requests for participation from new members or participants as reflected in UNFSA Article 11(KI; KII.1a);*
- *Developed and applied equitable and transparent allocation criteria, including for new entrants (KI.I.2);*

Immediate measures

- *Developed publicly available lists of authorised and active vessel[44] lists for all gears, including small-scale fishing vessels capable of catching significant amounts of species under responsibility* ***TMWG-2010****.*
- *Continue their work on the global list of tuna vessels, including the assignment of a unique vessel identifier* ***TMWG-2010***

[44] The definition of 'active vessel' is to be determined by individual RFMOs

- *As appropriate, RFMOs include only vessels on their active vessel1 register in any scheme for reducing capacity by eliminating vessels.* ***TMWG-2010***
- *Review existing capacity against the best available scientific advice on sustainable levels of catch and implement measures to address any overcapacity identified.* ***TMWG-2010***
- *Consider implementing 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.* ***TMWG-2010***
- *Establish strong requirements for the provision of accurate data and information to secretariats so that the status of tuna stocks can be accurately assessed.*
- *Members and cooperating non-members make a firm commitment to provide these data on a timely basis, cross-checked with data from market, landings and processing establishments* ***TMWG-2010***
- *Develop a consistent enforceable regime for sanctions and penalties applied to RFMO members and non-members and their vessels that breach rules and regulations* ***TMWG-2010***
- *Do not undermine the effectiveness of conservation and management measures by exemption or exclusion clauses.* ***TMWG-2010***
- *Ensure that all conservation and management measures are implemented in a consistent and transparent manner and are achieving their management goals.* ***TMWG-2010***
- *Review and strengthen their MCS framework to improve the integrity [fuller implementation] of the management regime and measures.* ***TMWG-2010****v*

Medium term measures

- *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."* ***TMWG-2010***
- *Ensure that all stocks are maintained at sustainable and optimal levels through science-based measures.* ***TMWG-2010***
- *Review and develop management regimes, based inter alia on the concept of fishing rights* ***TMWG-2010***
- *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.* ***TMWG-2010***
- *Ensure a constant exchange of information on fishing capacity of fleets operating within their zones as well as the mechanisms to manage this capacity.* ***TMWG-2010***

2. COMPLIANCE AND ENFORCEMENT

a) Flag State duties: The extent to which the RFMO…

- *Members are fulfilling their duties as flag States under the treaty establishing the RFMO, pursuant to measures adopted by the RFMO, and under other international instruments, including, inter alia, the 1982 LOSC, the UNFSA and the 1993 FAO Compliance Agreement, as applicable (KI.I-7.);*

b) Port State measures: The extent to which the RFMO has…

- *Adopted measures relating to the exercise of the rights and duties of its members as port States, as reflected in UNFSA Article 23 and the Code of Conduct for Responsible Fisheries Article 8.3 (KI.5);*
- *Promoted the implementation of the implementation of the FAO Agreement on Port State Measures to Prevent, Deter and Eliminate IUU (KIII);*
- *Effectively implemented these measures (KI);*

c) Monitoring, control and surveillance (MCS): The extent to which the RFMO has…

- *Adopted integrated MCS measures (KI.I.5) (e.g., required use of VMS (KI.I.5), observers (KI.I.5), catch documentation (KI.I.5; KIII) and trade-tracking schemes (KI.II.1), restrictions on transhipment, boarding and inspection schemes) (KI.I5); monitoring of farming (KI.I.5);*
- *Instituted deterrent penalties and sanctions to both members and non-members (KI.I.6). Developed more IUU-deterrent measures (detection and quantification mechanisms (e.g. of trade) (KI.I.7);*
- *Identified beneficial owners and genuine link (K.I.I.7);*
- *Developed stronger transshipment control (KI.I.5);*
- *Effectively implemented these measure (KI);*

d) **Follow-up on infringements:** The extent to which the RFMO has…

- *Followed-up on infringements to management measures with its members and cooperating non-members (KI);*

e) **Cooperative mechanisms to detect and deter non-compliance:** The extent to which the RFMO has…

- *Established adequate cooperative mechanisms to both monitor compliance and detect and deter non-compliance with existing measures (e.g., compliance committees, vessel lists, sharing of information) (KI.I.7)*;
- *Effectively utilized these mechanisms (KI);*
- *Harmonized these measures across RFMOs (KI.I.5);*
- *Harmonized their positive lists of tuna fishing vessels (K.I.I.7)K.I.II.2).*
- *Adopted Unique Vessel identifiers (UVIs) including for support vessels (KI.II.2; KII.1h).*
- *Developed a Global Register of active tuna vessels (ATVs) to be examined with the intent to eliminate double-counting when vessels are active in several convention areas (KIII). (KII.1c; KIII.p6); Recorded vessels by gear type (KIII, p5);*
- *Established by 2013 and coordinate among RFMOs a common vessel database linked to existing Consolidated List of Active Vessels (CLAV) (KIII, p.6);*
- *Collaborate in the development of the FAO Global Record of Fishing Vessels (KIII, p.7-8, 23)*).
- *Developed a robust compliance review mechanisms (KII.1d; KII.1.g); Rec. to establish a common format for assessing compliance and streamline and harmonize processes (KIII, p.8, 23*
- *Harmonized their IUU vessel lists and listing/delisting procedures to facilitate enforcement (KI.I.7; KII.1.i; KIII); Developed a Global list of IUU vessels (KI.II.2; KII.1i); Adopted Basic Principles for cross-listing IUU vessels (K3-019, p.24).*
- *Harmonized transshipment measures (KII);*

f) Market-related measures: The extent to which the RFMO …

- *Adopted measures relating to the exercise of the rights and duties of its members as market States. (KI.I.5);*
- *Developed traceability from catching to markets (KI.I.8) and harmonised trade-tracking programmes (KI.II.1); Implementation Catch Documentation Schemes (CDS) (KIII);*
- *Effectively implemented these market-related measures (KI);*

VMS

- *Establish standards for VMS messages (on format, content, structure and frequency)* ***MCSWG-2010***
- *Ensures that 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.* ***MCSWG-2010***

Transshipment

- *Cooperate with other tuna RFMOs to standardize Transshipment Declaration forms (format; required data fields; minimum timeframes for submission to the Secretariats, flag States, coastal States, and port States.* ***MCSWG-2010***
- *Establish that advance notifications must be provided to the Secretariat for those high seas transshipment activities that are permitted by the Commission's measures (for example, 36 hours in advance of the transhipment operation taking place).* ***MCSWG-2010***
- ***Observers***
- *Support the establishment of regional observer programs which could be built on existing national programs.*
- *Clearly establish the purpose and scope of the information collected by the regional observer program (e.g. 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.* ***MCSWG-2010***
- *Develop minimum standards or procedures to promote comparable observer-generated data.* ***MCSWG-2010***
- *Where appropriate and practical, subject all gear types in high seas fishing operations to observer coverage, adopting a minimum of 5% coverage as an initial level. Coverage should be evaluated and may be adjusted depending on the scope and objectives of each observer program or particular conservation and management measures.* ***MCSWG-2010***
- *Develop agreements such that RFMO-authorized high seas observers may operate effectively in the various ocean basins covered by other RFMOs with a view to avoiding duplication of observers. Such observer programs will provide required data to the RFMO in whose area the fishing operations take place.* ***MCSWG-2010***
- *Exchange [between RFMOs] information and examples of the observer programmes standards including: (i) Training material and procedures; (ii) On-board reference materials; (iii) Health and safety issues; (iv) Rights, and responsibilities of vessel operators, masters, crew and observers; (v) data collection, storage and dissemination (incl. between RFMOs; (vi) Debriefing protocols and procedures; (vii) Reporting formats – especially for target and by-catch species;(h) Basic qualifications and experience of observers.* ***MCSWG-2010***

Catch Documentation Schemes (CDS)

- *Establish or expand the use of CDS, e.g. to species not currently covered and to which current conservation and management measures apply.* ***MCSWG-2010***
- *Ensure compatibility between new or expanded CDS and existing certification schemes already implemented by coastal, port and importing States.* ***MCSWG-2010***
- *Cooperate with other RFMOs to developa common/harmonized CDS form and the use of electronic systems and tags to enhance the efficiency, effectiveness and utility of a CDS.* ***MCSWG-2010***
- *Take into account fish caught by purse seine fisheries and delivered to processing plants when implementing an expanded CDS.*
- *Consider a tagging system for fresh and chilled products to improve the implementation of new or expanded CDS.* ***MCSWG-2010***
- *Develop a simplified CDS form to cover catches by artisanal fisheries that are exported (see Appendix 3, EU form as an example).* ***MCSWG-2010***
- *Provide technical assistance and capacity building support to assist developing countries in implementing existing or expanded CDSs. Ensure that funds that currently exist in RFMOs can be used for this purpose.* ***MCSWG-2010***

Port State Measures

- *Encourage Members to consider signing and ratifying the FAO Port State Measures Agreement at their earliest opportunity.* ***MCSWG-2010***
- *Where they do not already exist and are 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 CCSBT.* ***MCSWG-2010***

Data

- *Cooperate with other tuna RFMOs to develop protocols for exchanging data, including provisions for data confidentiality to support scientific and MCS purposes* ***MCSWG-2010***

3. DECISION-MAKING AND DISPUTE SETTLEMENT

a) **Decision-making**: The extent to which the RFMO…

- *Has transparent and consistent decision-making procedures that facilitate the adoption of conservation and management measures in a timely and effective manner;*
- *Has developed and considers Decision-Making Guidelines (outlined in K3-008; KIII, p.7, 23);*
- *Elaborated a Strategy Matrix (KII. App. 1);.*

b) **Dispute settlement**: The extent to which the RFMO has…

- *Established adequate mechanisms for resolving disputes;*

4. INTERNATIONAL COOPERATION

a) Transparency: The extent to which the RFMO has…

- *Extent to which the RFMO is operating in a transparent manner, as reflected in UNFSA (Art. 12) and the CCRF (Art. 7.1.9);*
- *Extent to which RFMO decisions, meeting reports, scientific advice upon which decisions are made, and other relevant materials are made publicly available in a timely fashion (KI.I.7).*
- *information exchange (among RFMOs and Flag States, port States and market States) (K.I.I.7);*

b) Relationship to cooperating non-members: The extent to which the RFMO has…

- *Facilitated cooperation between members and non-members, including through the adoption and implementation of procedures for granting cooperating status (KI).*

c) Relationship to non-cooperating non-members: The extent to which the RFMO has…

- *Identified fishing activity by vessels of non-cooperating non-members and measures to deter such activities (KI);*

d) Cooperation with other RFMOs: The extent to which the RFMO has…

- *Cooperated with other RFMOs, including through the network of Regional Fishery Body Secretariats (KI).*
- *Enhanced scientific cooperation, organizing symposia; coordinating meeting dates; leaving adequate time between science and decision meetings (KI.I.14);*
- *Harmonized programmes (KI.II.1), listings (KI.II.2) and control measures (KI.II.3); Standardized forms (KI.II.4);*
- *Reported to COFI (KI.III.1);*
- *Has establishment of a policy and technical follow-up mechanism (KI.III.3);*
- *Has contributed to a Joint Technical WG on Management Strategy Evaluation (MSE) to facilitate the implementation the PA (KIII, p.4 and Annex 3, 1.3);*
- *Has agreed to create a Steering Committee regarding progress in implementing the Kobe decisions (Kobe III, p.9, 23);.*
- *Agreed and contributed to the WGs to held before Kobe III in Barcelona and Brisbane (2010);*
- *Harmonization of presentation of stock assessment results (K.I.II.4). Adoption of the Kobe Plot.*

e) Special requirements of developing States: The extent to which the RFMO has…

- *Recognized the special needs of developing States and pursues forms of cooperation with developing States, including with respect to fishing allocations or opportunities, taking into account UNFSA Articles 24 and 25, and the Code of Conduct of Responsible Fisheries Article 5 (KI, Appendix 15));.*
- *Extent to which RFMO members, individually or through the RFMO, provide relevant assistance to developing States (including SIDS), as reflected in UNFSA Article 26 (KI). Particularly in capacity-building in data collection, science and assessment, meeting participation, fishery development (KI.I.13; KI Appendix 15; KII.1j; KIII, P.8) and implementation of port States measures (KIII, p.23);*
- *Considered the vulnerability, dependence and capacity (level of burden) of coastal developing States (including SIDS) and enhanced their ability to conserve, manage, and develop their fisheries (KII.1b;KII.1j);*

Communication by tuna RFMOs (Omnibus series- To distribute within section 5

- *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 III.* ***(SAWG-2010)***
- *The application of the Kobe II strategy matrix should be expanded and applied primarily to stocks for which sufficient information is available.* ***(SAWG-2010)***
- *Tuna RFMOs should develop mechanisms to deliver timely and adequate information to the public on their scientific outcomes.*
- *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. Enhanced cooperation between tuna RFMOs* ***(SAWG-2010)***
- *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 III meeting.* ***(SAWG-2010)***
- *Tuna RFMOs should actively cooperate with programs integrating ecosystem and socio-economic approaches such as CLIOTOP to support the conservation of multi-species resources. Capacity-building* ***(SAWG-2010)***
- *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.* ***(SAWG-2010)***
- *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.* ***(SAWG-2010)***
- *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).* ***(SAWG-2010)***
- *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.* ***(SAWG-2010)***
- *The structural weaknesses in the receiving mechanism for capacity building within a country should be improved by working closely with Tuna RFMOs* ***(SAWG-2010)***

5. FINANCIAL AND ADMINISTRATIVE ISSUES

a) Availability of resources for RFMO activities: The extent to which the RFMO has…

- *The financial and other resources needed to achieve the aims of the RFMO and to implement*

the RFMO's decisions (KI), e.g. in research programmes, meetings and assistance to developing States;

b) Efficiency and cost-effectiveness: The extent to which the RFMO has…

- *Efficiently and effectively managing its human and financial resources, including those of the Secretariat.*
- *Assessed its performance using Kobe I criteria (KI.I.9)*
- *Contributed to the development of common criteria and best practices as tools to guide the strengthening of these organizations;*

ANNEX 3 – EC RESPONSE TO THE ESC RECOMMENDATIONS SINCE 2008

The first two columns are taken from the SA-2008 report as updated in 2014. The third column has been added, based on responses received specifically from the Secretariat to our request and it allows a comparison between the scientific advice and the management decision (Action taken). Overall, the ESC recommendations appear to have been well followed.

Year	Summary of management advice	Action taken by the CCSBT
2008 ESC 13	• Reduce fishing mortality by immediately eliminating all unreported/under-reported catches.	• MCS Resolutions were adopted in 2008 to assist in eliminating unreported/under-reported catches, e.g.: CDS; VMS; monitoring transhipments at sea; List of authorised farms; modified list of authorised vessels.
	• Adopt by no later than 2011 a Management Procedure as a basis to guide management advice	• A management procedure was adopted by the CCSBT in 2011.
	• Reduce uncertainty about historical catch and effort; • Ensure accurate future catch and effort reporting; • Consider using a wider range of indicators within MPs to guide management; • Develop and maintain in the long term reliable indices of recruitment and spawning biomass;	• All recs. agreed by the EC and fully taken into account in the ensuing work of the ESC. • Recs. indirectly addressed through the MCS measures adopted in 2008 (specified above) and improved since then, together with a high-level code of practise for scientific data verification (2012). • Reduced reliance on CPUE through use of fishery independent indicators (from aerial surveys and close-kin genetic abundance estimates)
2009 ESC 14	• Effect a meaningful reduction in catch below the current TAC of 11,810t.	• CCSBT agreed to a TAC of 9,749t for 2010 and 2011, with an effective catch limit of 9,449t because Australia and New Zealand voluntarily reduced their catches.
	• Noting the EC intent to adopt a MP in 2010, using catch and effort data as inputs, the EC should take steps to ensure accurate future catch and effort reporting (*repeats 2008 rec*.).	• CCSBT adopted a Resolution on action plans to ensure compliance with conservation and management measures, inter alia to obtain improved catch reporting through increased observer coverage of longline vessels to the 10% target and starting stereo video monitoring trials to more accurately estimate the weight of the SBT catch entering farms. The observer coverage improved. The stereo video technology was tested but is not yet implemented.
2010 ESC 15	• If the MP is implemented in 2011 with: (i) a 1-year lag, the current TAC of 9449t should remain for 2012; (ii) no lag, the MP should guide the TAC setting for 2012.	• The MP was adopted in 2011 with no lag for the first 3 years and it guided the TAC setting (2nd bullet).

Year	Summary of management advice	Action taken by the CCSBT
	• Noting the EC intent to adopt an MP in 2010, the EC should take steps to ensure accurate future catch and effort reporting (repeats 2008 and 2009 recs)	• The CC terms of reference were revised to reinforce its role in relation to obtaining accurate data on all fisheries. It was also agreed that a compliance plan would be developed to manage important compliance risks.
2011 ESC 16	• The MP should be adopted. Eight sets of parameters were provided for the EC to consider. Following the request from a Special Meeting of the Commission, the MP was re-tuned for a zero lag and for 12 sets of possible parameters. • Noting the importance of accurate data inputs for the performance of the MP, the ESC again recommended that the EC continue to take steps to ensure accurate future catch and effort reporting.	• The MP and one set oa parameters were adopted and have been used since then to guide the setting of the TAC ever since. • A Compliance Plan, including a 3 year action plan to address priority compliance risks for the CCSBT was agreed. It was agreed that a Compliance Manager would be appointed in 2012. These steps are broader than catch and effort reporting, but are mentioned here because they form part of a package that was considered necessary to obtain accurate reporting.
2012 ESC 17	• Consistent with the MP and based on the review of indicators, the 2011 stock assessment, MP inputs and the preliminary outcomes of the close-kin analysis, the ESC recommended not to revise the 2011 TAC decisions for 2012.	• The 2011 TAC settings were not revised. • Following on the 2008-2011 recs. on SBT catch reporting, the EC adopted a Resolution on the Reporting of all sources of mortality of southern bluefin tuna; a High-level code of practise for scientific data verification; and agreed to start desktop, independent Quality Assurance Reviews (QARs) of Members compliance assurance systems regarding their national allocations
2013 ESC 18	• In the absence of exceptional circumstances (meta rule), the MP could be used to set the TAC for the years 2015-17 and the TAC could be increased to 14,647 t per year.	• The CCSBT adopted the MP's recommendation of 14,647t per year for 2015-2017. Ten tonnes were allocated for research mortality allowance and the rest to Members and CNMs. • Further, the TAC for 2016-2017 would be confirmed at CCSBT 21 (October 2014).
	• Based on the outcome of the MP application to 2015-17, the TAC fixed by the EC in 2011 for 2014 could be maintained (at 12,449 t)	• The 2011 EC recommendation for the 2014 TAC was maintained. • Further on SBT catch reporting, four desktop QARs were completed in 2013. Two more desktop reviews were scheduled for 2014 together with two on-site reviews. In addition, the CCSBT also agreed to enhanced minimum performance requirements for the CDS and transhipments.

ANNEX 4: SEMI-QUALITATIVE ANALYSIS OF THE CCSBT PERFORMANCE IN RELATION TO THE CHATHAM HOUSE STANDARDS (AS IN LODGE ET AL., 2007)

	CHATHAM HOUSE CRITERIA	score	%
	A. GENERAL PRACTICE	**8,5**	**85,0**
1	Members commit themselves to the overriding objective of ensuring the long-term conservation and sustainable use of straddling, highly migratory and discrete fish stocks subject to their governance; **These objectives are in the Convention and Strategic Plan.**	1	
2	Recognize that if the issue of allocations is not dealt with expeditiously, the stability of the RFMO will be threatened; **Following past crisis, this is implicitly recognized. In addition, allocations are specified in CCSBT's Resolution on the Allocation of the Global Total Allowable Catch**	1	
3	Consider, or be able to consider, the use of a wide range of mechanisms for achieving acceptable economic benefits to all parties from cooperation and compliance, such as transfers or the leasing of fishing opportunities; **Not formally dealt with. However, the management regime involving allocations of the global SBT TAC enables individual Members to optimize their own economic benefits. Furthermore, the CCSBT's Resolution on Limited Carry-forward of Unfished Annual Total Allowable Catch of Southern Bluefin Tuna within Three Year Quota Blocks enhances Member's ability to better manage their allocations.**	0,5	
4	Recognize the grave threat to the stability of the cooperative regime posed by IUU fishing and work vigorously towards the suppression and elimination of such fishing; **Ongoing.**	1	
5	Ensure that any non-member having a real interest in fishing in the area of competence of the RFMO assumes the full rights and benefits of membership of the RFMO and that, for such non-members, the status of cooperating non-member is regarded as transitional. **The CNM status is regarded as transitional to full Membership and two (South Africa and the EU) of the three current CNMs are moving towards applying for full Membership.**	1	
6	Seek means of accommodating new members that will not undermine the long-term stability of the RFMO, such as by allowing new members to purchase or lease fishing opportunities from existing RFMO members **Transfer of opportunities not allowed yet.**	0	
7	Ensure that no prospective member will be considered for membership unless it has demonstrated its commitment to cooperation by, for example, ratifying either the UN Convention on the Law of the Sea or UNFSA or submitting a written declaration of its commitment to abide by the provisions of both UNCLOS and UNFSA. **This is not the case. Indonesia joined before joining the UNFSA. But CCSBT itself was established before UNFSA. UNCLOS should be enough.**	1	
8	Seek to ensure that the RFMO has the required resilience and flexibility to withstand the effects of unpredictable events on their fisheries, such as environmental shocks. The cooperative management agreements underpinning each RFMO should have built into them mechanisms for responding to such events; and in recognition of the role of uncertainty in fishery resource management, ensure that the precautionary approach to resource management is an integral part of their convention or decision-making processes. MP and Meta rule processes.	1	
9	RFMOs should actively cooperate with one another in order to ensure that their broad objectives of long-term conservation and sustainable use are achieved, to promote greater consistency in the application of UNFSA and to suppress and eliminate opportunities for IUU fishing. **Done through the Kobe Process and cooperation between individual RFMOs, including through Memoranda's of Understanding (with IOTC and ICCAT) and formal Cooperative Arrangements (with WCPFC and CCAMLR).**	1	
10	The members of RFMOs should ensure that there exists provision for regular performance assessment by each RFMO, whether through self-assessment, external review or a combined panel of internal and external reviewers, based on widely recognized best practices and agreed indicators. The results of these assessments should be made publicly available. **Normal practice.**	1	

	B. CONSERVATION AND MANAGEMENT PRACTICES	23,5	71,2
1	The overarching objective of the RFMO includes optimal and sustainable long-term utilization, subject to the control of fishing capacity and fishing effort commensurate with these objectives. This control is informed by adequate data collection and sharing, use of the best available science and application of the precautionary approach and ecosystem considerations in decision-making, including the recovery of overfished stocks. **Current practice. MP**	1	
2	There are target and limit reference points for fishing mortality and population size for all target and commercially retained species and stocks (where stocks are known or are reasonably expected to exist). **Current in MP**	1	
3	Assessments and predictions of the status of species or groups of species include all sources of mortality, taking in non-fishery mortality and fishing mortality owing to retained catch, discarded catch and deaths that do not involve capture. Fishing mortality is from all fisheries, including those managed under other jurisdictions and illegal, unreported and unregulated fishing. **Progressing to it**	0,5	
4	Target reference points are consistent with achieving long-term optimal utilization and with the ecological properties and role of the target species (for example, a key prey species), and that they have a low probability of violating the limit reference point in the context of the information available and the management arrangements in place. Current in MP.	1	
5	Key prey species affected by fishing are identified and the reference points are modified to take account of the needs of dependent predators as well as those of the fishery. In the absence of detailed understanding of feeding dependencies and for animals low in the food chain, the target biomass reference point should be greater than BMSY, consistent with a precautionary approach (for instance, it might be 75 per cent of the unfished level). **Not practiced. CCSBT mandate refers only to SBT which is a terminal predator. CCSBT aims at reducing the impact of SBT fishing on ERS.**	0,5	
6	The limit reference point for fishing mortality is no greater than the mortality giving maximum long-term sustainable yield, as specified in UNFSA. Current in MP	1	
7	The limit reference point for stock size is the size below which it is known or expected that there is a much greater probability of significantly reduced recruitment but at which the probability of significantly reduced low recruitment is still small. The limit reference point for stock size could be at a size that has been historically shown to be safe and/or below which stock dynamics are unknown. **Difficult to score. In principle YES. In practice, NO as the stock is depleted. Score 0.5**	0,5	
8	There are agreed management strategies or decision rules to determine the catch, the level of fishing or other management measures that will be applied, depending on the status of the stock and the information available. Current in MP	1	
9	The [management] strategy is demonstrated to deliver, in the long term, a balanced probability of the stock being above or below the target and a very low probability of the stock violating the limit reference point. **No demonstration yet. This is the objective though.**	0,5	
10	The [management] strategy has a high chance of success both in view of the information that is realistically expected to be available to assess stock status and for a reasonable range of stock and ecosystem productivity and variability. “High” is subjective. Calculated probability of success is 70%	0,5	
11	The fishing mortality caused by the strategy decreases with increasing uncertainty about the present or predicted stock status and decreases as a limit reference point is approached. **Current in the MP.**	1	
12	As a part of the overall management strategy, there is a pre-agreed rebuilding plan that is triggered for stocks at or below a biomass limit reference point. The rebuilding plan has a very high chance of rebuilding the stock to a rebuilding target in a specified timeframe, for example 10–30 years or one to two fish generation times. The recovery target is the stock size giving the maximum long-term yield, as specified in UNFSA. Targeted fishing is very low or ceases below a biomass limit reference point, and any catches permitted for monitoring below the limit reference point do not significantly reduce recovery time. Current in MP	1	
13	As a part of the general management strategy, there is pre-agreement on fishing mortality reduction to be triggered if fishing mortality is greater than its limit reference point. Fishing mortality may be higher than the limit reference point for an agreed period if it is a part of a planned reduction of biomass in order to attain the target biomass. **Current in MP**	1	

	There is an agreed strategy for the development of new or exploratory fisheries that impact on species or ecosystems in ways that have not been fully assessed previously – for example, fisheries that target new species, use significantly modified gear or operate in new areas. These strategies ensure that fishery expansion does not outpace the information needed to determine the management measures for optimal and sustainable use. The strategy provides cautious conservation and management measures until there is sufficient information to allow identification of appropriate measures for incremental development and/or long-term utilization. The strategy includes, inter alia: (I)• notification of new or exploratory fisheries; (II) • precautionary limits on the catch, the fishing effort and the number of operators, further defined for particular sub-areas as appropriate; (III) • requirements for information collection and assessment; and (IV)• specification of how this information and assessment is used to trigger decisions about subsequent fishery development.		
14	There are identified limits for the acceptable impact on key non-target species (both fish and non-fish species), including associated or dependent species and especially protected or endangered species, and for bycatch of any non-target species as a whole. These limits are intended to ensure that populations and stocks are not excessively depleted, that wastage is avoided, that there is minimal impact on protected or endangered species, and that the functional ecosystem of which fisheries are a part is maintained. The FAO's international plans of action for relevant bycatch should be implemented. Measures to ensure that limits are not exceeded, and to minimize bycatch generally, are: **No limits have been agreed, but CCSBT's ERS Recommendation (http://www.ccsbt.org/userfiles/file/docs_english/operational_resolutions/Recommendation_ERS.pdf) specifies that Members and Cooperating Non-Members will, to the extent possible, implement the International Plan of Action for Reducing Incidental Catches of Seabirds in Longline Fisheries (IPOA-Seabirds), the International Plan of Action for the Conservation and Management of Sharks (IPOA-Sharks), and the FAO Guidelines to reduce sea turtle mortality in fishing operations (FAO-Sea turtles), if they have not already done so.**	0,5	
15	ERS: risk-based impact assessment of the effect of fishing activities on non-target • species, followed by explicit analytical assessments and/or action when risk is determined to be high; **Some ERA for birds**	0,5	
16	ERS: bycatch limits or caps for species and species groups; **No limits established**	0	
17	ERS: shifting fishing from times or areas with high and/or significant bycatch; **Not established**	0	
18	ERS: preference for use of fishing gear, including mesh sizes and types, that reduces bycatch; **Mandatory use of Tori lines south of 30°S and CCSBT's ERS Recommendation which specified that Members/CNMs should follow the measures of IOTC, ICCAT and WCPFC when fishing for SBT in those Convention Areas.**	1	
19	ERS: use of practices and equipment to reduce interactions and bycatch (for example, night fishing, tori poles, hook design, excluder devices, controlled or zero offal discharge and acoustic deterrents); **Same as the preceding one.**	1	
20	ERS: release of captured animals alive and unharmed whenever possible. Not aware of such rules in CCSBT	0,5	
	Habitats that are important to fishery production or for non-target species, including associated or dependent species, and/or that are affected by fishing are recognized, and that limits of acceptable impact are identified. Management measures to limit the impacts include: Not relevant. "Habitat" not impacted?. (i) • risk-based impact assessment of the effect of fishing activities on habitats, followed by explicit analytical assessments and/or action when risk is determined to be high; (ii) • restrictions on fishing in certain areas and/or at certain times (time/area closures); (iii) • restrictions on gear types that could affect the habitat; (iv)• establishment of other area-based management measures such as marine protected areas in order to protect and conserve habitats of special concern; (v) • moratoria on new fisheries in sensitive habitats until adequate management measures can be identified; and (vi) • appropriate engagement in the management of land-based pollution and coastal development.		
21	There is an identified level of fishing capacity that is commensurate with long-term optimal and sustainable utilization, and that the capacity operating in the fishery is monitored. Authorization and other management measures should be used to limit capacity to the desired level. **No explicit capacity assessment. Use catch limits.**	0,5	
22	There are effective provisions and mechanisms for the collection and reporting of data to the RFMO that are necessary for the monitoring and management of fishery operations and for tracking the status of the resources and ecosystems. **Current practice**	1	
23	DATA: There are quality assurance and verification mechanisms to ensure that the data are sufficiently accurate and reliable to ensure optimal and sustainable utilization of the resources and ecosystem. QARs and other processes including the High-level Code of practice for Scientific Data Verification.	1	

24	DATA:• Economic and social information is collected that is relevant to allocation decisions, to measuring economic efficiency and to management for optimal utilization. **No data**	0	
25	DATA: The provisions and mechanisms meet the requirements of UNFSA Annex I. Practically all.	1	
26	DATA: Scientific observer programmes are used as appropriate and particularly to gather information about the impact on the fishery non-target species and habitats. **Yes but still a lot to do to gain confidence and to provide the data in sufficient detail.**	0,5	
27	DATA: There is coordinated data collection and sharing between RFMOs and coastal states, and among RFMOs, with management responsibility for relevant shared fisheries and/or ecosystem elements. Still limited sharing of "non-public" data between RFMOs, but there is a well-coordinated approach for sharing of most aggregated data between Members and CNMs.	0,5	
28	DATA: Data are shared through recognized international data management arrangements. **There are protocols in place.**	1	
29	There are robust methods for measuring and monitoring so as to account for illegal, unreported and unregulated (IUU) fishing and catch, including bycatch. **Some problems left with recreational, artisanal and surface fisheries, discards from longline fisheries and with possible fishing and exploitation of new markets by non-cooperating non-members**	0,5	
30	There is a scientific body with appropriate technical expertise to assess issues related to (1) the target species,(2) the broader ecosystem and, as appropriate,(3) the socio-economic impacts of fishing. OK for one, progressing for 2 no for 3.	0,5	
31	The advice of the scientific body includes management options and risks in relation to target and limit reference points. Fishery data are assessed on a timely basis consistent with the life history of affected species and the management strategy. **The advice is publicly available. Current practice**	1	
32	When the advice of the scientific body is not followed by the RFMO's decision-making body, the reasons are given and are made publicly available. The CCSBT usually followed scientific advice and since 2010, its Rules of Procedure require that "the Commission shall articulate the rationale for its decisions, including where they differ from the science advice provided to the Commission, for inclusion in the report of every annual or special meeting prepared by the Executive Secretary".	1	
33	There is periodic independent advice and peer review of the assessments, reference points and management strategies. The advice and review are made publicly available. **Current practice**	1	
	C. ALLOCATION PRACTICES	6,5	81,3
1	To the extent practicable, participatory rights [45] are allocated only when the membership of an RFMO includes all relevant coastal States and States fishing on the high seas for the relevant stocks. **This is the case now.**	1	
2	Decisions on total allowable catch or total allowable effort are insulated and separate from decisions on allocation. Participatory rights should be expressed as percentages of agreed allowable catch or effort rather than as absolute tonnages. **Current practice**	1	
3	There is agreement in advance as to how new members will be accommodated in the scheme of participatory rights. Accommodating new members must not be allowed to result in increases of catch or effort with regard to stocks that are fully subscribed or oversubscribed. **No transparent process, But TAC not oversubscribed**	0,5	
4	There is a pre-agreed formula about how any increases or decreases in catch or effort limits will be distributed among members. **Current practice**	1	
5	Strong measures exist to ensure the integrity of allocations, including penalties for breaches of national allocation and reductions in future allocations for breaches of other conservation measures. RFMO members' records of compliance with conservation and management measures should be an essential criterion for allocation. CCSBT has a Corrective Actions Policy, that amongst other things, requires pay back for breaches of national allocations. **This has been followed for most Members. However, one CNM and one Member have not paid back their recent excess catches. In the latter case, this may be addressed by capacity development as outlined in the policy dependent on the results of a QAR that is in progress.**	1	

[45] In CCSBT "participatory rights are allocations of the TAC

6	The process through which allocations are negotiated and the basis for the allocation are transparent. When decisions on allocation require mandatory consensus there is provision for a 'circuit breaker', such as the appointment of an ad hoc expert panel or a conciliator, that prevents any one member from exercising a de facto veto over the allocation of participatory rights. **Non-transparent negotiations on allocation to new entrants and for adjustments to effective catch limits of Members**	0,5	
7	There is an agreed process and timeframe for the review of participatory rights. CCSBT reviews the status of CNMs on an annual basis, but there is no agreed regular process for reviewing the participatory rights of Members in general. Allocations (if allocations = Participatory rights) are adjusted in accordance with an agreed process with changes in the TAC.	1	
8	The impacts of the allocated rights, including any measures on the transferability of those rights, are closely monitored for their potential to change fishing dynamics and to have unintended consequences on both target stocks and the broader marine ecosystem. **The TAC impact on stocks is regularly monitored. The impact on the ecosystem is not. Hence yellow**.	0,5	
	D. COMPLIANCE AND ENFORCEMENTPRACTICES	**8,5**	**70,8**
1	A clear statement of general flag State duties similar to those set out in Article 18 of UNFSA; **These duties are specified in the Convention (e.g. Articles 5 and 15)**	1	
2	A vessel register, which includes fishing vessels as well as transhipment and support vessels. Vessels not entered into the register should be deemed not authorized to operate in the RFMO's area of competence. Unique identification numbers, including IMO numbers and radio call signs, for all vessels on the register should be required; Exists and updated regularly. **There is no current requirement for IMO numbers, but this is scheduled for consideration in 2014.**	1	
3	A centralized vessel monitoring system for direct reporting in real time to the secretariat for all vessels involved in fishing operations on the high seas; **NO centralized VMS in CCSBT**	0	
4	Prohibition of transhipment at sea or closer monitoring through a comprehensive compliance observer programme to supervise all transhipment operations at sea. **The transhipment Transhipment at sea is only permitted where there are CCSBT transhipment observers in place and a transhipment observer is on board the carrier vessel. Otherwise (as in the WCPF area) transhipment at sea is not permitted.**	1	
5	A scheme of port State measures taking into account at least the minimum requirements set out in the FAO's Model Scheme. Landing and transhipment in port should be allowed only when the flag State confirms in writing that the vessel has complied with all relevant measures; **CCSBT does not have formal Port State Measures or any requirements for monitoring transshipments in port.. Left to members to implement**	0,5	
6	Non-discriminatory trade- and market-related measures, such as catch certification and trade documentation systems, particularly for high-value fisheries. To be fully effective, RFMOs should make a greater effort to monitor patterns of trade, although this will be facilitated by the introduction of species-specific and product-specific trade codes. Trade- and market related measures and systems need to be designed to minimize the burden on enforcement officials. Developing countries may need to be provided with assistance in order to meet the requirements of these schemes; **CDS exists.**	1	
7	A system for punishing flag States and/or their vessels and nationals for violations of an RFMO's conservation and management measures, in addition to requirements for each member of the RFMO to follow up any violations by its flagged vessels. Overfishing should invariably lead to a loss of fishing opportunities in future years. Members should be required to report on domestic actions taken, including imposition of fines, seizure of catch/gear, sequestration of vessel, suspension of license or reduction/withdrawal of fishing opportunities; **CCSBT has a Corrective Actions Policy (http://www.ccsbt.org/userfiles/file/docs_english/operational_resolutions/CPG3_CorrectiveActions.pdf) imposing "repayments" for overcatching..**	1	
8	Schemes to target non-parties fishing in contravention of an RFMO's conservation and management measures, such as blacklisting non-party vessels and listing irresponsible flag States, followed by agreed actions against those vessels and States; **current practice**	1	
9	Schemes promoting compliance by nationals of its members, requiring the latter to ensure that natural and legal persons subject to their jurisdiction do not support or participate in IUU fishing; **Current practice**	1	

10	Mechanisms for sharing surveillance information with adjacent coastal States and with other RFMOs targeting non-members conducting IUU fishing. No formalized system. But information is shared between Members. **A (rather limited) policy on MCS information collection and sharing is available at http://www.ccsbt.org/userfiles/file/docs_english/operational_resolutions/CPG4_Information_Collection_Sharing.pdf**	0,5	
11	Observer programmes, in particular where the areas of jurisdiction are vast and at-sea inspections are random or absent. **The scientific observers scheme can be improved. (cf recommendation SA 2008-23). Action to that effest is foreseen in 2014**	0,5	
12	Inspection schemes, which include provision for reciprocal boarding and inspection (in accordance with articles 21 and 22 of UNFSA) as well as an obligation on the flag State to take immediate action against a vessel suspected of having committed a serious violation. Such action shall include stopping the vessel's fishing operations and requiring its immediate rerouting to port. **CCSBT does not have one, except for the WCPFC area in which CCSBT vessels are required to abide by those rules when in that Convention Area as those Flags are also Members of WCPFC.**	0	
	E. DECISION-MAKING PRACTICES	**10,5**	**58,3**
	General	**7**	**100,0**
1	The RFMO has transparent procedures in place for taking decisions**. Current practice**	1	
2	Rules of procedure have been adopted for all deliberative and decision-making organs and are publicly available. **Current practice**	1	
3	The principal decision-making organ should hold regular sessions. In addition, it should be able to hold extraordinary or emergency meetings at short notice as provided for in the rules of procedure. **Current practice**	1	
4	The rules should permit decision-making by consensus, a show of hands, a recorded vote, a roll-call vote or, in urgent situations, by post or electronic communication. All members are entitled to participate fully in decision-making. Where voting is provided for, each member should have one vote; and rules for the participation of REIOs should be designed to avoid the possibility of 'double voting'. The rules should also provide for participation by observer organizations and specify their rights to participate in meetings of the RFMO's organs and to receive and submit documents in advance of meetings. **Current practice**	1	
5	Consensus means adopting a decision without a vote and in the absence of a formal objection by a member when the decision is adopted. **Current practice**	1	
6	The rules should require a high quorum for taking decisions on questions of substance. **Current practice**	1	
7	The rules should provide for the public availability of official documents and reports of meetings and for data and information related to management decisions except for that which is truly proprietary. All documents and reports should be available online. **Current practice except for documents formally classified as confidential (e.g. with low, medium and high risk) in accordance with the Rules and Procedures for the Protection, Access to and Dissemination of Data Compiled by the CCSBT. Available at http://www.ccsbt.org/userfiles/file/docs_english/operational_resolutions/CCSBT_Confidentiality_Rules.pdf**	1	
	Administrative/budgetary decisions	**0,5**	**16,7**
1	The RFMO has procedures and rules in place for taking decisions on administrative, budgetary, membership, organizational and similar matters. These decisions may be taken by a majority vote and may be cast in the form of resolutions, recommendations or decisions, as appropriate**. The CCSBT uses a consensus voting. No majority vote**	0	
2	Apart from decisions on conservation and management measures, decisions in subsidiary organs of an RFMO should be taken by a simple majority vote and should be reviewable by the principal organ (**subsidiary bodies of CCSBT only make recommendations. No decisions**) . As far as possible, the reports of subsidiary bodies should reflect the full range of views expressed. Reports of the scientific advisory body to decision-makers should contain the rationale for all findings and recommendations, including attendant assumptions, uncertainties and areas of disagreement. (**this is present practice. Disagreements are reported**)The rules of procedure of the decision-making body should provide that the advice and recommendations of the scientific advisory body are taken fully into account. **Too complex. Not sure it is all fulfilled. No majority vote. The rest OK**	0,5	
3	Procedural decisions are taken by a simple majority vote. The decision whether an issue is one of procedure or of substance is treated as one of substance**.**	0	

	No majority vote		
	Decisions on questions of substance	**3**	**37,5**
1	Decisions about questions of conservation or the management of the stock(s), including the allocation of catches or fishing effort, are ones of substance. Decisions should be cast in the form of conservation measures, including fishing opportunities. **Current practice**	1	
2	The rules should encourage members to keep in mind their duty to cooperate and thus to use their best efforts to reach consensus, but without thereby giving the equivalent of a veto to any member. Decisions should be deferred if necessary in order to permit further consultations. **The CCSBT consensus voting gives de facto a veto right to any objector member.**	0	
3	If consensus still cannot be reached after extended consultations, the rules should provide for the assistance of a facilitator or a conciliator. This assistance should be available at the request of the presiding officer or any participant in the consultations. **We did not find anything in the conflict resolution parts of the convention and its rules of procedure.**	0	
4	When all efforts to reach consensus have been exhausted, decisions in an RFMO that has fewer than five members may be taken by consensus, coupled with a right for a dissatisfied member which does not block consensus to request a review of the decision by a panel; **Not anymore the case**		
5	When all efforts to reach consensus have been exhausted, decisions in an RFMO that has more than five members (b) more than five members should require a high majority for adoption such as two-thirds of the members voting for or against, rising to three-quarters in an RFMO with more than 12 members[1]. **No majority voting**	0	
6	A member objecting to or intending to vote against the adoption of a proposal can request a review or enter an objection to the (proposed) decision within a short time limit. Objections should be reasoned and should be based on one of the following grounds**: No majority voting. There is no objection priority.**	0	
7	Once taken, decisions are accepted and implemented by all members, including those voting against, subject to any pending legal disputes referred to the dispute settlement mechanism. **Current practice**	1	
8	The general principles and the functions of RFMOs contained in articles 5 and 10 of UNFSA should be incorporated into the texts governing decision-making in individual RFMOs. **UNFSA has not been incorporated in CCSBT but most of the provisions are implemented.**	1	
	F. DISPUTE SETTLEMENT PRACTICES	11	91,7
1	An RFMO should encourage members to cooperate in such a way as to prevent legal disputes from arising. Decision-making arrangements should give every possibility for reaching consensus through consultations, mediation, conciliation and expert review panels. **CCSBT convention foresees that**	1	
2	An RFMO should have arrangements in place for handling and resolving any differences within its membership over questions of law, including the interpretation or application of the organization's constitutive instrument, that cannot be settled by consultations or other agreed means. **CCSBT convention foresees that, But it did not really work in the past**	1	
3	these arrangements should take full account of Part XV of the LOS Convention and Part VIII of UNFSA. They should be at least as effective as Part XV and Part VIII; in particular, they should not create any derogations from those two parts. In other words, the arrangements of an RFMO should not be cast in terms that prevent a member state that is a party to the LOS Convention and/or UNFSA from submitting a dispute about the interpretation or application of the LOS Convention or UNFSA to binding procedures of dispute settlement under Part XV or Part XIII, as the case may be**. CCSBT is in line with UNCLOS and largely with UNFSA.**	1	

4	An RFMO's procedures for resolving legal differences should, in principle, be open to all members, whatever their general status under international law. However, particular legal and political problems exist in relation to two categories. In the case of members which remain dependent territories, their administrative authorities should be urged to facilitate their participation in legal cases under appropriate conditions. A cooperating non-member of an RFMO should accept its arrangements for handling disputes as part of the wider arrangements for acquiring the status of cooperating non-member. **The provisions for the Extended Commission specify that the Convention articles apply mutatis mutandis.**	1	
5	The procedures should be compulsory in the sense that all members agree in the constitutive treaty or in advance of a dispute that in the event of failure to resolve a legal difference, each party to the dispute is entitled to submit it to an impartial expert panel or tribunal for a binding ruling.**This is the case**	1	
6	Procedures should be expeditious. Provisional measures should be available during the proceedings in order to protect the rights of the parties, the stocks and the marine environment generally. **The process was protracted in the past. Nothing has been changed.**	0	
7	Whenever there are technical or scientific issues in dispute, the procedures should permit the participation of technical or scientific experts. **Current practice**	1	
8	The procedures should be transparent. Submissions by the parties to the dispute and decisions by the dispute settlement procedure should be made public. Other members of the RFMO and observers such as industry groups and conservation organizations should be entitled to submit a statement of their views, and these should also be publicly available. **Current practice**	1	
9	The secretariat of the RFMO should assist the panel, court or tribunal by submitting documentation and information about the work of the RFMO. **Current practice**	1	
10	The procedures should produce a result that is binding upon the parties. If not, the procedures should safeguard the application of section 2 of Part XV of the LOS Convention. **Current practice**	1	
11	The members of the panel should be recognized for their impartiality and their experience of international fisheries or international law. Decisions should be taken by a simple majority vote; if the panel is not unanimous, separate opinions should be permitted. **Current practice**	1	
12	12. If a difference of a general nature arises, the members of an RFMO should agree to request from an international court or tribunal an advisory opinion on a stated legal question of direct relevance to its work. **Current practice**	1	
	If, in future, there should be judicial review by international courts and tribunals of the decisions of RFMOs, appropriate trade bodies and NGOs should be afforded an opportunity to submit information and argument to an extent similar to that in many national courts**. Not sure of what to do with this**		
	G. TRANSPARENCY	**7**	**87,5**
1	The RFMO has given effect to article 12 of UNFSA, which requires transparency in decision-making processes and other activities of RFMOs, and that representatives from IGOs and NGOs should be afforded an opportunity to participate in meetings on reasonable terms. **Current practice**	1	
2	The RFMO has adopted streamlined processes for applications for observer status that minimize lead times for applications and clearly specify the information required in support of the application and the justification for observer status. **Current practice**	1	
3	3. The rules of procedure adopted by the RFMO provide for long-term approval of observer status instead of requiring an annual approval process. **Current practice**	1	
4	Observers have access to all official documents in the same timeframes as members. Reasons of confidentiality should not be used as a means to unduly restrict access to documents. The basis upon which confidential documents are treated as confidential should be made available. **Current practice**	1	
5	**5.** Rules of procedure minimize the capacity for RFMOs to selectively close meetings to observers. A decision to close a meeting requires the agreement of at least a majority of members. **CCSBT accepts the decision of just one member**	0	
6	The websites maintained by RFMOs are readily and publicly accessible. They should be kept up to date and contain summary statistics on catch, effort and trade as well as all meetings documents, including background papers and reports. **Current practice**	1	

7	7. When committees have been established in order to provide advice on conservation and management measures for certain geographical areas or species, RFMOs should ensure that the nature of participation in them does not result in a lack of transparency. If membership of these committees is limited in scope, provisions should be in place to support attendance as observers by other members of the RFMO, particularly developing State members. **Current practice**	1	
8	The rules of procedure for the conduct of committees, including those established to provide advice on conservation and management measures, do not provide for lower standards of transparency, including in regard to participation and access to meetings papers and reports, than those adopted by the Commission. **Only the EC can exclude a paper from release**	1	
	H. SPECIAL REQUIREMENTS OF DEVELOPING COUNTRIES	2,5	**35,7**
1	The RFMO has processes in place to evaluate developing State members' level of dependence on managed stocks, for example vulnerability indices. **CCSBT does not have that.**	0	
2	The RFMO has processes in place to demonstrate the value of the potential benefits to members, especially developing State members, from better management of stocks on the high seas and in areas under national jurisdiction. **CCSBT does not have that.**	0	
3	Participation of developing States in the work of the RFMO is assured, either through RFMO-managed voluntary contributions or, preferably, through guaranteed budgetary contributions, as in the case of the WCPFC. Where appropriate, such participation should extend to observers as well as members. This is particularly relevant when developing countries are involved in trade in product subject to catch or statistical documentation schemes and when full membership may not be appropriate or necessary for application of the scheme. **Only partly implemented**	0,5	
4	Formulae for contributions to the budget of the RFMO take into account the ability of developing States to make financial contributions. **The contribution formula in the Convention makes no allowance for Developing States and the ability to pay.**	0	
5	The RFMO has given effect to Part VII of UNFSA by structured programmes of assistance to developing States. The WCPFC provides an example of current best practice for the establishment of a special fund for this purpose. **They do have a fund and have provided assistance to Indonesia, but there is no structured program per se.**	0,5	
6	Programmes of assistance, whether financed through voluntary contributions or otherwise, are linked to the agreed priorities and the strategic plan of the RFMO. Where appropriate, these programmes should include enhancing the ability of developing countries to participate in catch documentation schemes and port state regimes and to comply with their obligations to supply statistical information. RFMO secretariats may have an important role to play in the coordination and practical implementation of the programmes of assistance. **Current practice but no structured programme yet.. The Secretariat conducted a workshop in Indonesia on the Catch Documentation Scheme in 2013. In 2012, the CCSBT funded a Management Procedure/Stock Assessment workshop in Indonesia to assist Indonesia to participate in its scientific processes.**	1	
7	The RFMO has adopted strategies that permit developing States to develop their own fisheries for straddling and highly migratory fish stocks. **Nothing beyond giving them an allocation**	0,5	
	The RFMO has adopted high seas allocation criteria that meet the objectives of UNFSA Part VII as regards participation by developing States. **CCSBT does not differentiate between high seas and EEZs allocations**		
	I. INSTITUTIONAL PRACTICE	13	**100,0**
1	Institutional structures, whether the body concerned is an RFMO or an arrangement, must be sufficiently robust to achieve its core conservation and management objectives**. This is the case**	1	
2	The financial resources allotted to the RFMO or arrangement are adequate to enable it to achieve its core objectives. **This is the case**	1	
3	The RFMO has a transparent process in place for scrutinizing and adopting its budget. **This is the case**	1	
4	The formula for the RFMO's members to assess contributions to its budget is equitable, transparent and sustainable. **This is the case**	1	
5	Assessed contributions to the budget are paid in full and on time. There should be sanctions, for example withdrawal of voting rights, interest payments and suspension of fishing rights, in case of non-payment. **This is apparently the case**	1	

6	The RFMO is able to establish medium- and long-term operational plans identifying research and management priorities for use of the resources of the organization and for the alignment of voluntary contributions. **This is the case**	1	
7	Voluntary (extra-budgetary) contributions are applied only to support the agreed priorities and strategic plan of the RFMO. **Voluntary contributions are not usual practice within the CCSBT. There have been voluntary contributions in the past, but these were not what I consider to be 'normal' voluntary contributions**	1	
8	The staff of the secretariat are recruited according to merit, taking due account of the need for equitable geographic representation**. This is not specified in the Convention but the practice is in line with the principles (merit and distribution)**	1	
9	The secretariat is given both clear guidance about members' expectations of it and resources adequate for carrying out its work**. YES**	1	
10	The secretariat applies appropriate generic management system standards (for example ISO 9000), to all aspects of its operations. **. YES**	1	
11	Financial regulations, rules and procedures and staff regulations covering the internal administration of the RFMO are in place. **. YES**	1	
12	RFMOs actively cooperate with one another and with other relevant regional organizations so as to ensure that their broad objectives of long-term conservation and sustainable use are achieved. **Yes through the Kobe process and other informal processes.**	1	
13	There exists provision for regular performance assessment by each RFMO, whether through self-assessment, external review or a combined panel of internal and external reviewers, based on widely recognized best practices and agreed indicators. The results of these assessments should be made publicly available. Yes.	1	