



CCSBT-EC/1510/12

Total Allowable Catch and its Allocation

PURPOSE

To provide relevant background information to support the Extended Commission's (EC) deliberations on:

1. Attributable SBT Catch;
2. TAC Determination, including
 - a) Total Allowable Catch (TAC) for 2016-2017,
 - b) Method for setting the TAC for 2018-2020,
 - c) Principles and process for taking account of non-member catch in the 2018-2020 TAC period;
3. Research Mortality Allowance for 2016; and
4. Allocation of the TAC.

BACKGROUND

An extract from the Report of CCSBT 21, containing the discussion of the Total Allowable Catch and its Allocation at that meeting, is provided at **Attachment A** for information.

(1) Attributable SBT Catch

The Attributable SBT Catch is that part of a Member's or Cooperating Non-Members' (CNM) catch that is counted against its allocation. CCSBT 21 agreed on a common definition for the Attributable SBT Catch as follows:

“A Member or CNM's attributable catch against its national allocation is the total Southern Bluefin Tuna mortality resulting from fishing activities within its jurisdiction or control¹ including, inter alia, mortality resulting from:

- *commercial fishing operations whether primarily targeting SBT or not;*
- *releases and/or discards;*
- *recreational fishing;*
- *customary and/or traditional fishing; and*
- *artisanal fishing.”*

At CCSBT 21, the EC agreed to act in good faith to implement this definition of the Attributable SBT Catch as soon as practicable but not later than the 2018 quota year. Also agreed, was the principle that Members and CNMs will begin to make adjustments to their national allocations in line with the common definition of attributable catch. These adjustments would be made on the basis of best available information.

In addition, CCSBT 21 agreed action points for 2015 to 2018 in relation to implementing the Attributable SBT Catch. These action points are provided in Table 1 of **Attachment A**. The action points relating to Members' Attributable SBT Catches in 2015 are repeated below:

- i. Individual Member research on applicable sources of mortality and report back to ESC² and CC for discussion and review.

¹ Except where a vessel is chartered to a person or entity of another Member or CNM, and if a catch is attributable to that Member or CNM.

² Extended Scientific Committee.

- ii. Members shall endeavour to set allowances to commence for 2016-17 quota years for all sources of attributable mortality based on best estimates and notify other Members by CCSBT22. If Members can't they will notify CCSBT22 and explain why they are unable to and set a date by which they can set the allowance.
- iii. The EC initiate discussion and agreement to a process for dealing with attributable catch within the next quota block (2018-20).

It is expected that each Member/CNM will report on progress made in relation to points “i” and “ii” above. For the third point, the EC will need to consider issues such as:

- Whether or not a process, such as a peer review process, is required to agree to: (1) each Members’/CNMs’ best estimate of their attributable SBT mortality; and (2) the subsequent adjustment that each Member/CNM should make to its allocation to account for this mortality. An alternate approach would be for each Member/CNM to act in good faith and be responsible for setting their own adjustment to account for this mortality and to also publicly report the analysis and estimates used to determine their adjustment.
- Confirming the timeframe for finalising estimates of attributable SBT mortality and subsequent mortality adjustments. CCSBT 21 agreed to a timeframe for researching applicable sources of mortality that does not conclude until 2017 (see Table 1 of **Attachment A**). However, the TAC and national allocations of the TAC for 2018-2020 is due to be set during 2016. To provide certainty for industry as to its share of national allocations, it would be beneficial to provide estimates of the required mortality adjustments to national allocations at the same time as setting the TAC and determining national allocations.
- That the mortality of SBT from sources such as releases and discards, recreational fishing, customary and artisanal fishing is likely to vary on a year to year basis. Consideration should be given to permitting flexible approaches for accounting for these mortalities. These could include allowing a variety of approaches such as: (1) a pre-determined adjustment to the national allocation that is subject to alteration once every few years when new estimates become available; and/or (2) an adjustment that changes on an annual basis in accordance with estimates of the actual mortality for that year.

(2) TAC Determination

(a) Total Allowable Catch (TAC) for 2016-2017

At CCSBT 21, the EC confirmed that the TAC would be 14,647 t for each of the years from 2016 and 2017.

The EC needs to confirm whether there are any exceptional circumstances that should cause the TAC for 2016 or 2017 to be revised. The “meta-rule” process³ agreed for the Management Procedure (MP) specifies that “*The need for invoking a metarule should only be evaluated at the ESC based on information presented and reviewed at the ESC*”. In relation to this, paragraphs 177 to 180 of the report of the Twentieth Meeting of the Scientific Committee (SC20) states that:

177. In 2015 the ESC has evaluated whether there are events, or observations, that are outside the range for which the management procedure was tested and the implications of this for TAC setting. The scope of this evaluation covered input data to the MP (CPUE and aerial survey data), the question of unaccounted mortality, reported catch and future recruitment monitoring.

³ Whether any exceptional circumstances exist and a recommended process to follow to deal with any exceptional circumstances.

178. *The ESC agreed that the longline CPUE in 2014 was within the range predicted in the testing of the MP. However, there was no aerial survey in 2015, or other direct recruitment indices, available to determine if recruitment in 2015 is within the expected bounds.*
179. *The absence of an aerial survey in 2015 requires review of the implications for TAC recommendations, because these data are a requirement of the MP. The ESC has evaluated the consequences of no aerial survey in 2015 and found that there is virtually no effect on the predicted performance of the MP for the Reference Set. Provided there is an aerial survey in 2016, and effective recruitment monitoring in the future, the MP can be used to recommend 2018-2020 TACs in 2016.*
180. *The review of UAM in 2015 has not changed the perception of ESC on the potential scale of UAM. The ESC also noted the workplan of EC related to this issue (EC2014 para. 53). The ESC advises that the EC take steps to ensure adherence to its TACs and as a matter of urgency, to take steps to quantify all sources of unaccounted SBT mortality. If substantial levels of unaccounted mortality are confirmed, then there will be a need to retune the MP to achieve the EC's rebuilding objective.*

In relation to confirming the TAC for 2016 to 2017, paragraph 182 of the SC20 report stated that: *“Based on the results of the MP operation for 2015-17 in 2013 and the outcome of the review of exceptional circumstances in Agenda Item 11.1, the ESC recommended that there is no need to revise the EC’s 2013 TAC decision regarding the TACs for 2016-17. The recommended annual TAC for the years 2016-2017 is 14,647.4 t.”*

(b) Method for setting the TAC for 2018-2020

It is possible that this matter will be addressed in the discussion of agenda item 8.1 (Consideration of the ESC’s advice in response to requests from the SFMWG).

The July 2015 meeting of the Strategy and Fisheries Management Working Group (SFMWG) agreed that for the Management Procedure (MP) to be run in 2016 to recommend a TAC for 2018 to 2020, it would be necessary to conduct the scientific aerial survey in 2016. Consequently, the SFMWG recommended that the scientific aerial survey be conducted in 2016 using “Option 2” from Table 1 of paper CCSBT-SFM/1507/09 (presented to CCSBT 22 as CCSBT-EC/1510/BGD01) and noted that the Secretariat will establish and manage a contract directly with CSIRO to conduct the 2016 aerial survey.

After the SFMWG meeting, it was determined that “Option 2” could not be conducted unless a three year commitment to the aerial survey was made. Subsequently, it was decided to proceed with a hybrid of “Option 3”, in which a reduced aerial survey would be conducted together with calibration of a new spotter.

The ESC has advised that *“Provided there is an aerial survey in 2016, and effective recruitment monitoring in the future, the MP can be used to recommend 2018-2020 TACs in 2016.”*

In responding to a request for advice from the SFMWG, part of the ESC’s response⁴ was that:

- *“In the event that the EC decides not to continue with the aerial survey, the ESC recommends that the transition to a new MP that uses gene tagging as input be brought forward. In this case, the AS 2016 must occur and the gene tagging should be fast-tracked for 2016.”*

And

- *“In the event that the aerial survey is discontinued and the current MP can no longer be used, three options (A, B and C in paragraphs 157-163) were developed for fast-tracking the transition to a new MP.”*

⁴ The ESC’s full response is provided at Attachment A of CCSBT-EC/1510/11.

Paper CCSBT-EC/1510/06 provides a budget for 2016 and indicative costs estimates for 2017-2018, for two of the ESC's options ("A" and "B") for fast-tracking the transition to a new MP.

(c) Principles and process for taking account of non-member catch in the 2018-2020 TAC period

CCSBT 21 agreed that the ESC, CC and Members would undertake analyses to provide estimates of non-member catch and that market analyses would be commissioned on significant markets to contribute to estimating non-member catch. In relation to this:

- The ESC considered papers which provided estimates of non-Member catches. The total catch of SBT by non-Members in the IOTC and WCPFC Convention Areas was estimated to be 120 t to 580 t (mean estimate for 2011-13 using two different estimation approaches). It was agreed that given the status of the stock, these estimates were not trivial. The ESC also advised the Extended Commission (EC) to take steps to ensure adherence to its TAC and as a matter of urgency, to take steps to quantify all sources of unaccounted SBT mortality. If substantial levels of unaccounted mortality (UAM) are confirmed, then there will be a need to retune the Management Procedure (MP) to achieve the EC's rebuilding objective.
- The Secretariat contacted a variety of organisations to seek requests for proposals to conduct market analyses on significant markets. Following intersessional correspondence with Members (including Circulars #2015/044, 048 and 057), it was agreed to accept a proposal from TRAFFIC to determine the presence of SBT products in China through trade analysis and DNA species identification of sashimi tuna sampled from Beijing and Shanghai. Further discussion with TRAFFIC is underway.

CCSBT 21 agreed to the principle that the CCSBT will make an adjustment for non-Member catch in the next TAC period (2018-2020) and beyond. CCSBT further agreed that during 2015, the EC would initiate discussion on the principles and process for taking account of non-member catch. The intention is that in 2016, the EC will decide on the adjustment to take account of non-Member catch in the 2018-2020 period.

It seems probable that precise estimates of non-Member catches will not be available in 2016 and that the EC will need to make decisions on the level of adjustment to make based on the best information available at that time.

(3) Research Mortality Allowance

CCSBT 20 agreed that as part of the process to account for all SBT mortalities, an allocation of 10 t per year would be made for Research Mortality Allowance (RMA) within the TAC recommended by the MP.

Australia has requested 6.7 t of RMA to cover four projects in 2016. The four projects of Australia are focused on:

- Investigation of (a) the spatial dynamics and mortality rates of SBT utilising electronic tagging techniques, and (b) the impacts of noise associated with oil and gas exploration on SBT in the Great Australian Bight [1.0 t];
- Examining the molecular basis for endothermy using SBT as a novel model [0.5 t];
- Health assessment of wild southern bluefin tuna [1.2 t]; and
- A pilot gene tagging field trial [4.0 t].

The ESC supported the provision of 6.7 t of RMA for these projects.

Japan has requested 1.0 t of RMA for trolling surveys of juvenile SBT in Western Australia. The ESC supported the provision of 1.0 t of RMA for this project.

The EC should confirm whether it approves these requests for Research Mortality Allowance, totalling 7.7 t.

(4) Allocation of the TAC

The allocations to Members and Cooperating Non-Members are set in accordance with the CCSBT’s “Resolution on Allocation of the Global Total Allowable Catch” (see **Attachment B**).

CCSBT 21 confirmed that the allocations for 2015 to 2017 would be as follows:

	(A) South Africa accedes by 31 May of the specific year and receives a nominal catch of 150 t for that year	(B) South Africa does not accede by 31 May of the specific year and does not receive an increased allocation for that year ⁵
Japan	4,737	4,847
Australia	5,665	5,665
New Zealand	1,000	1,000
Korea	1,140	1,140
Taiwan	1,140	1,140
Indonesia	750	750
South Africa	150	40
Philippines	45	45
European Union	10	10

The EC will consider whether it should take any decisions to change these allocations. This might be necessary, for example, to respond to requests from Members/CNMs or to implement any necessary adjustments in accordance with section 3.1 of CCSBT’s Corrective Actions Policy.

Prepared by the Secretariat

⁵ These figures apportion the additional 110 t (from South Africa) to Japan because all other Members have reached their nominal allocation.

Extract of Agenda Item 7 from the Report of CCSBT 21

Agenda Item 7. Total Allowable Catch and its allocation

7.1. Attributable SBT Catch

50. The EC considered the definition of attributable catch provided by CC9 and agreed on the following revised definition:
- “A Member or CNM’s attributable catch against its national allocation is the total Southern Bluefin Tuna mortality resulting from fishing activities within its jurisdiction or control⁶ including, inter alia, mortality resulting from:*
- *commercial fishing operations whether primarily targeting SBT or not;*
 - *releases and/or discards;*
 - *recreational fishing;*
 - *customary and/or traditional fishing; and*
 - *artisanal fishing.”*
51. Members held extensive discussions in relation to implementing the definition of Attributable SBT Catch agreed at CC9. The Chair described the outcome of these discussions as a genuine endeavour to operationalise the attributable catch definition and to take into account advice regarding unaccounted mortalities.
52. Following these discussions and noting the ESC advice relating to unaccounted mortalities, the EC agreed to:
- Confirm the 2016-17 global TAC;
 - The principle that CCSBT will make an adjustment for non-Member catch in the next TAC period (2018-2020) and beyond;
 - Act in good faith to implement the common definition of attributable catch adopted at CCSBT21 as soon as practicable but not later than the 2018 quota year;
 - The principle that Members and CNMs will begin to make adjustments to their national allocations in line with the common definition of attributable catch. These adjustments would be made on the basis of best available information;
 - Direct the ESC, CC and Members and CNMs to undertake analyses to provide estimates of non-member catch; and
 - Commission market analyses on significant markets to contribute to estimating non-member catch.
53. The action points shown in Table 1 were agreed by Members, noting that within the table, “External” refers to non-Member catches, while “Internal” relates to Members’ attributable catches.

⁶ Except where a vessel is chartered to a person or entity of another Member or CNM, and if a catch is attributable to that Member or CNM.

Table 1: Action points in relation to implementing the Attributable SBT Catch.

	External	Internal	ESC work schedule
2015	The EC initiates discussion on the principles and process for taking account of non-member catch in the 2018-20 TAC period. The ESC, CC and Members to undertake analyses to provide estimates of non-member catch. Commission market analyses on significant markets to contribute to estimating non-member catch.	<ol style="list-style-type: none"> 1. Individual Member research on applicable sources of mortality and report back to ESC and CC for discussion and review. 2. Members shall endeavour to set allowances to commence for 2016-17 quota years for all sources of attributable mortality based on best estimates and notify other Members by CCSBT22. If Members can't they will notify CCSBT22 and explain why they are unable to and set a date by which they can set the allowance. 3. The EC initiate discussion and agreement to a process for dealing with attributable catch within the next quota block (2018-20). 	Collation of information on unreported mortalities and categorising this information in accordance with OM "fleets" (ESC19 Report).
2016	The ESC, CC and Members continue analyses to provide estimates of non-member catch. The EC decides on the adjustment to take account of non-member catch in the 2018-20 TAC period.	<ol style="list-style-type: none"> 1. The EC if necessary continue discussion so as to agree on a process for dealing with attributable catch within the next quota block (2018-20). 2. Individual Members continue research on applicable sources of mortality and report back to the ESC and CC for discussion and review. 	ESC scheduled to run MP to recommend TAC for 2018-2020.
2017	The ESC, CC and Members continue analyses to provide estimates of non-member catch.	Individual Members continue research on applicable sources of mortality & report back to the ESC and CC for discussion review.	ESC scheduled to conduct full stock assessment and the first formal review of MP.
2018		Full implementation of the common definition of attributable catch.	

54. New Zealand thanked other Members for the cooperative approach taken to a difficult issue. It stated that in agreeing to confirm the TAC for 2016 and 2017, New Zealand relies on the assurance that the advice from the ESC is precautionary in nature, consistent with its obligations to this Extended Commission, and that it also relies on the assurances of Members that they will act in good faith to take action to implement the agreed common definition of attributable catch.
55. New Zealand expressed its disappointment at the failure to agree to the exchange of CDS and market data at this meeting. It stated that the ESC has identified access to this information as being important to its work, and New Zealand therefore strongly encourages Members to resolve this issue intersessionally, giving consideration to independent analysis to assist in the review. New Zealand said that it would be open to providing an independent review of the CDS information.
56. Japan shared New Zealand's view regarding unaccounted mortalities that the CCSBT needs to have cooperation, integrity, and good faith coming from all Members. Japan supported the idea of an independent review of CDS data.
57. Australia declared its interest in the independent review, but it should be in the context of the data requirements of the ESC, which includes both CDS data and market data. It stated that for the ESC to be able to provide complete estimates of unaccounted mortality all data should be examined and looked at, not just CDS data.

7.2. TAC Determination

58. Humane Society International stated that it would like to see the EC develop a new stock assessment based on and including all sources of mortality, and for the EC to hold off any decisions on TAC and delay any increase until that stock assessment has been completed or is clearly underway.
59. The Chair advised that EC has agreed that the TAC for 2015 will be 14,647 t as recommended by the Management Procedure.
60. The Chair referred to paragraph 123 of the SC 19 report, which states:

“Based on the results of the MP operation for 2015-17 in 2013 and the outcome of the review of exceptional circumstances in Agenda Item 10.1, the ESC recommended that there is no need to revise the EC’s 2013 TAC decision regarding the TACs for 2016-17. The recommended annual TAC for the years 2016-2017 is 14,647 t.”
61. The EC confirmed that the TAC would be 14,647 t for each of the years from 2016 and 2017.

7.3. Research Mortality Allowance

62. The EC approved the requests from Australia for Research Mortality Allowances (RMA) totalling 5.95 t in 2015.
63. It was noted that the EC has agreed that an allocation of 10 t would be made for Research Mortality Allowance within the TAC recommended by the MP.

7.4. Allocation of TAC

64. Indonesia reiterated the proposal it submitted to CCSBT 20 to increase its national allocation by 300 t and QAR phase-1 and phase-2 has been undertaken. It stated that the current allocation was too low in relation to the number of fishing vessels and in consideration of its artisanal vessels, which have a long history catching SBT within Indonesia’s EEZ where SBT migrates. Indonesia asked the EC to consider article 8(4c) of the Convention which states that in deciding upon allocations among the Parties 3, the Commission shall consider *“the interests of Parties through whose exclusive economic or fishery zone southern bluefin tuna migrates”*. Indonesia believes that accommodating their interest in the SBT quota system, will provide a great contribution to artisanal fishers in terms of better life and income, and at the same time, will also eliminate the increase of unaccounted SBT mortality in the future. Indonesia requested EC Meeting to develop a paragraph to respond Indonesia’s request as it is described in Paragraph 45.
65. The Chair summarised Members’ discussion of this issue. Having noted the comprehensive presentation by Indonesia and the steps proposed to strengthen its management arrangements in 2015, Members showed considerable sympathy for its position. A number of ways to accommodate Indonesia’s request were discussed but given the current position of the stock, none were able to be progressed. Members noted that in the situation of a rising TAC, this situation would change. Members were heartened by Indonesia’s plans to improve its SBT management and encouraged them to continue this process.
66. The meeting confirmed that the allocations for 2015-2017 would be as specified in paper CCSBT-EC/1410/10. The agreed allocations are provided in Table 2 below.

Table 2: Current Allocations for each year 2015-2017.

	(A) South Africa accedes by 31 May of the specific year and receives a nominal catch of 150 t for that year	(B) South Africa does not accede by 31 May of the specific year and does not receive an increased allocation for that year ⁷
Japan	4,737	4,847
Australia	5,665	5,665
New Zealand	1,000	1,000
Korea	1,140	1,140
Taiwan	1,140	1,140
Indonesia	750	750
South Africa	150	40
Philippines	45	45
European Union	10	10

⁷ These figures apportion the additional 110 t (from South Africa) to Japan because all other Members have reached their nominal allocation.

Resolution on the Allocation of the Global Total Allowable Catch

(adopted at the Eighteenth Annual Meeting – 10-13 October 2011)

The Extended Commission for the Conservation of Southern Bluefin Tuna

Seized by the need to ensure the conservation and optimum utilisation of southern bluefin tuna based on the best available scientific advice,

Recalling agreement reached on nominal catch levels at the 16th annual meeting of the Extended Commission meeting and the Resolution on the Total Allowable Catch and Future Management of Southern Bluefin Tuna adopted at that meeting,

Further recalling the decisions of the Extended Commission adopted at its annual meeting in 2006,

Further to the Resolution on the Adoption of a Management Procedure adopted at the annual meeting of the Extended Commission in 2011,

Noting that the Management Procedure will be the basis for setting the total allowable catch from 2012,

Taking into account the desirability of a transparent and stable process for allocating total allowable catch to Members and Cooperating Non-Members, which provides greater certainty to Members and Cooperating non-Members, in particular for their fishing industries, and facilitates the administration of national allocations,

Recalling the Extended Commission agreed at its special meeting in 2011 to principles that would apply to the distribution of any increase in the global total allowable catch under the Management Procedure,

Further recalling that one of the agreed principles at that meeting was to develop a process for returning Japan's national allocation of the TAC to its nominal percentage,

In accordance with paragraph 3(a) of Article 8 of the Convention for the Conservation of Southern Bluefin Tuna, the Extended Commission decides as follows:

1. The total allowable catch (TAC) set on the basis of the Management Procedure (MP)⁸ shall be allocated among Members and Cooperating Non-Members according to this Resolution.
2. This Resolution shall be applied until allocations of all Members have returned to their nominal catch levels and will be applied from the first three-year TAC setting period under the MP, i.e. 2012 – 2014.
3. Unless this Resolution provides otherwise, the TAC shall be allocated among Members and Cooperating Non-Members as set out below.
4. Before any increase in the TAC is apportioned between Members the total absolute tonnages outlined in paragraph 10 will be allocated to Cooperating Non-Members

⁸The Management Procedure agreed to under the Resolution on the Adoption of a Management Procedure adopted at the annual meeting of the Extended Commission in 2011.

and, from the 2012 TAC period, the voluntary reductions made by Australia and New Zealand (255 tonnes and 45 tonnes respectively) will be returned.

5. If there is no change to the TAC, each Member's allocation will remain unchanged.
6. If there is an increase to the TAC, the additional tonnage will be allocated amongst the Members based on the nominal percentage level as agreed in 2009 and set out in the Annex to this Resolution. Where a Member reaches its nominal catch level, it shall be held at that level until all other Members reach their nominal catch levels.
7. If there is a decrease to the TAC, each Member's allocation will decrease consistent with its nominal percentage level.
8. Each Cooperating Non-Member shall receive a fixed amount of the TAC, subject to the annual review of their status as a Cooperating Non-Member.
9. The allocation of TAC may be revised with the entry of new Members and Cooperating Non-Members. The nominal catch levels will remain unchanged with the entry of new Members or Cooperating Non-Members, but the nominal percentage levels may change.
10. The allocation of TAC for 2012, 2013 and 2014 for Members and Cooperating Non-Members shall be as follows:

	2012	2013	2014
TAC	10, 449 t	10, 949 t	12, 449 t ⁹
Member			
Japan	2, 519t	2, 689t	3, 366t ¹⁰
Australia	4, 528t	4, 698t	5, 147t
New Zealand	800t	830t	909t
Republic of Korea	911t	945t	1036t
Fishing Entity of Taiwan	911t	945t	1036t
Indonesia	685t	707t	750t
Cooperating Non-Member			
Philippines	45t	45t	45t
South Africa ¹¹	40t	80t	150t
European Union	10t	10t	10t

⁹ As agreed in paragraph 7(iii) of the Resolution on the Adoption of the Management Procedure adopted at the annual meeting of the Extended Commission in 2011, the TAC for 2014 shall be 12, 449 tonnes or the output of the MP for 2015 - 2017 based on the 2013 stock assessment (whichever is the less), unless the Extended Commission decides otherwise based on the assessment of the Compliance Committee.

¹⁰ The Extended Commission agreed at its special meeting of the Extended Commission in 2011 that a process would be developed for returning Japan's national allocation of the TAC to its nominal percentage. To commence the return to its nominal catch level, Japan shall receive a positive adjustment of its national allocation for 2014 of 10 percent of the increase subject to the TAC increasing to 12,449 tonnes and a compliance review at CCSBT 20 (2013).

¹¹ The increase in South Africa's tonnage in 2013 and 2014 is subject to its accession to the Convention for the Conservation of Southern Bluefin Tuna. In the case that South Africa does not accede to the Convention, any additional tonnage will be apportioned to Members according to their nominal catch percentage levels.

Annex

Members' Nominal Catch and Percentage Levels

<i>Member</i>	<i>Nominal Catch Level (tonnes)</i>	<i>Nominal Percentage Level</i>
Japan	5,665	36.9%
Australia	5,665	36.9%
Republic of Korea	1,140	7.4%
Fishing Entity of Taiwan	1,140	7.4%
New Zealand	1,000	6.5%
Indonesia	750	4.9%