



## Secretariat Review of Catches (ESC agenda item 4.2)

This paper provides an update of global SBT catch estimates.

### 1) Global SBT Catch by Flag

The global catch by flag is provided at Attachment A. The estimated catch for the 2007 calendar year was 11540t, which is the lowest estimated global catch for over 50 years.

The figures in Attachment A that differ from those in the report of the 2007 Extended Scientific Committee meeting are shown in bold type. These differences were mainly due to revised data provided by South Africa and correction of some discrepancies noted at ESC12 between the Secretariat's global catch data and data in Japan's national report. The figures in Attachment A are the same as in the global catch table provided during the 2008 data exchange with the exception that Attachment A includes the 2007 catch reported by the European Commission.

Some changes have been made to the global catch table from that used in previous years. These changes have been made to reflect comments in the ESC12 report (paragraphs 22-23 and Attachment 11) and comments made by Australia and Japan in the CCSBT14 report (paragraph 129). In particular:

- Recreational catches are now reported separately. Where the recreational catch is not yet known, the cell is left blank. At present, the only recreational catch information in the global catch table is for New Zealand in 2007.
- The column for "Retrospective unreported catch estimate scenarios" has been separated into a surface fisheries catch scenario and a longline fisheries catch scenario. However, due to confidentiality that still exists in relation to these catch scenarios, the Secretariat recommends that the global catch table in the ESC report should:
  - exclude the retrospective catch estimate scenarios; and
  - contain explanatory text similar to that on the CCSBT web site, which is:  
*"recent reviews of SBT farming and market data suggests that southern bluefin tuna catches may have been substantially under-reported over the past 10-20 years and the data presented here do not yet include estimates for this unreported catch"*

In addition, due to confidentiality concerns, the Secretariat recommends that Attachment A of the present paper be excluded from the public domain.

- The "Total" column now includes all reported mortalities, whereas this previously excluded reported research mortalities. However, it should be noted that there is still no data on research mortalities prior to 2001.

### 2) Trade Information Scheme statistics

At ESC12, the meeting requested that the Secretariat provide Trade Information Scheme (TIS) information for future meetings of the ESC.

The complete details of the TIS scheme are available on the CCSBT web site at:

[http://www.ccsbt.org/docs/pdf/about\\_the\\_commission/trade\\_information\\_scheme.pdf](http://www.ccsbt.org/docs/pdf/about_the_commission/trade_information_scheme.pdf)

It should be noted that the TIS was not designed for estimating global catches and that the TIS has a number of major limitations in relation to estimation of global catches. These limitations include:

- The scheme only considers exports of SBT. Domestically consumed SBT are not covered by the scheme;
- For tuna farms, the scheme records the final weight of the farmed product, not the weight of the original catch (there are however, separate national TIS reporting requirements for farmed tuna).
- Japan does not treat landings from the New Zealand charter fleet as being imports, so the catch of these vessels often does not appear in the TIS.
- There are significant time lags between catch, export and import for some SBT fisheries. This results in lengthy delays (up to 2 years) before full catch information is available.
- The scheme involves reporting of net weights and product types on TIS documents, but no conversion factors have been agreed for converting these to whole weight estimates.
- Full details (including catching year, area and product type) from the TIS are only received when SBT are exported to a CCSBT Member or Cooperating Non-Member. When SBT is exported to a non member, the Secretariat receives net weight and export date from the exporter, but there is no requirement to provide product type or any catch details.

Bearing in mind the above limitations, Table 1 of Attachment B provides a summary of the catch per year and flag obtained from importers. A set of ad-hoc conversion factors (shown in Table 2 of Attachment B) was used to derive the whole weight catch estimates shown in Table 1.

Due to the above limitations, the TIS will usually underestimate the true weight of the catch. Therefore, the 5 highlighted cells in table 1 are of particular interest because these are larger figures than shown in the global catch table at Attachment A. The 2001 figure for “Other” and the 2002 figure for “Korea” are partially explained by the fact that some of the associated raw TIS data overlapped years but due to insufficient information, have been allocated to only the first year within Table 1. The remaining discrepancies warrant further investigation. The Secretariat has double checked its processing of the TIS data and no errors were detected in the processing. However, the conversion factors used may have provided misleading results (particularly for the “Other” figures).

Table 3 shows the net weight of SBT exported to different importing countries. The first full export year for which this type of data is available is 2003. For each year from 2003 to 2007, over 98% of SBT exports were sent to Japan.

### **3) Methods used by CCSBT Members to raise processed weights to whole weights for reporting total catches**

ESC12 requested the Secretariat to include, in conjunction with the global catch table, information on how Members raise processed weights to whole weights for reporting their total catch.

This information was requested from Members as part of the 2008 data exchange. Responses from Members and Cooperating Non-Members are summarised below.

Member / CNM	Response																																												
Australia	<p>The total catch by fleet statistics for the Australian longline fishery are calculated as whole weight by applying conversion factors to the weights reported on the Catch Disposal Records (Form CR4A). See Working Paper CCSBT-ESC/0709/32 for a copy of this form. The conversion factor applied depends on the process form code of the landed fish: Code A is for gilled and gutted fish with gill plates and tail removed; Code B is for gilled and gutted fish without gill plates or tail removed; Code W is for whole fish. The purse seine fishery catch is calculated by multiplying average live weights of the forty fish sample by the fish counts from the tow cage to farm cage transfers (including numbers of mortalities).</p> <p>Type A gutted, gill plate and tail wholly removed:  <math>1.176 * \text{processed weight} + 1.0\text{kg per fish}</math>            Type B gutted, gill plate and tail not removed:  <math>1.12 * \text{processed weight} + 1.0\text{kg per fish}</math></p>																																												
Japan	No information.																																												
New Zealand	<p>The conversion factors used by New Zealand in 2006 and 2007 for converting processed weights of SBT to whole weights are below:</p> <table border="1"> <thead> <tr> <th>State</th> <th>Description</th> <th>Conversion Factor</th> <th>Used in the last 2 years</th> </tr> </thead> <tbody> <tr> <td>DRE</td> <td>Dressed</td> <td>1.8</td> <td>Y</td> </tr> <tr> <td>FIL</td> <td>Fillets skin on</td> <td>2.5</td> <td>Y</td> </tr> <tr> <td>GRE</td> <td>Green</td> <td>1</td> <td>Y</td> </tr> <tr> <td>GUT</td> <td>Gutted</td> <td>1.1</td> <td>Y</td> </tr> <tr> <td>HGU</td> <td>Headed and gutted</td> <td>1.5</td> <td>Y</td> </tr> <tr> <td>GGO</td> <td>Gilled and gutted tail on</td> <td>1.1</td> <td>Y</td> </tr> <tr> <td>GGT</td> <td>Gilled and gutted tail off</td> <td>1.15</td> <td>Y</td> </tr> <tr> <td>MEA</td> <td>Fish meal</td> <td>5.6</td> <td>Y</td> </tr> <tr> <td>SKF</td> <td>Fillets skin off</td> <td>3.1</td> <td>Y</td> </tr> <tr> <td>SUR</td> <td>Surimi</td> <td>4.3</td> <td>N</td> </tr> </tbody> </table>	State	Description	Conversion Factor	Used in the last 2 years	DRE	Dressed	1.8	Y	FIL	Fillets skin on	2.5	Y	GRE	Green	1	Y	GUT	Gutted	1.1	Y	HGU	Headed and gutted	1.5	Y	GGO	Gilled and gutted tail on	1.1	Y	GGT	Gilled and gutted tail off	1.15	Y	MEA	Fish meal	5.6	Y	SKF	Fillets skin off	3.1	Y	SUR	Surimi	4.3	N
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Korea	Provides processed weights, which are raised by the Secretariat by applying a conversion factor of 1.15.																																												
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Philippines	Provides processed weights, which are raised by the Secretariat by applying a conversion factor of 1.15.																																												
South Africa	No information.																																												
European Commission	No information.																																												

**Prepared by the Secretariat**

## **Attachment A**

This attachment is only available in the Member's version of this document

## Summary Statistics from the CCSBT Trade Information Scheme

**Table 1:** Catch estimates from TIS import documents. The ad-hoc conversion factors shown in table 2 were used to convert processed weights into whole weight estimates. Data for 2006 and 2007 are likely to be incomplete due to time lags in the TIS. Highlighted cells are cases where the TIS catch estimate is higher than the nationally reported catch. No correction is made for missing documents or for exports to non cooperating countries.

Estimated Whole Weight of Catch (tonnes)											
Catch Year*	Australia (farms)	Australia (capture)	Japan	New Zealand	Korea	Taiwan	Philippines	Indonesia	South Africa	CCSBT RMA	Other
2001	10,750	96	0	368	735	1,380	43	172	0	0	286
2002	12,134	22	9	279	966	1,066	82	74	0	9	94
2003	12,531	34	0	306	197	1,148	68	49	5	9	26
2004	11,790	230	80	390	192	1,196	70	43	0	5	0
2005	12,162	30	84	259	19	750	50	37	0	1	0
2006	11,203	2	32	123	192	732	50	0	0	1	0
2007	12,079	3	0	160	512	673	45	0	25	0	0

\* Catch year is not recorded on the TIS for farms, so for farms, export year has been used as a proxy for the catch year. With the exception of December catches, the catch for farms and the subsequent export usually occur in the same year.

**Table 2:** Ad-hoc conversion factors used to convert processed weights to whole weights. The CCSBT not agreed on a set of conversion factors. The factors used here are an ad-hoc set from various sources and should not be considered as being accurate.

Product Type	Conversion Factor
Round	1
Gilled and gutted	1.15
Gilled and gutted, head off	1.5
Dressed	1.8
Fillets	2.5
Other	1.15

**Table 3:** SBT imports by country and year of export. Data is corrected for missing import documents and for exports to non cooperating countries. Quantities are expressed in net weights, not whole weights. Re-exports are not included in this table.

Net Weight of Imports by Country (tonnes)										
Export Year	Japan	USA	Korea	Belgium	Thailand	Great Britain	Hong Kong	Australia	Indonesia	Others*
2003	10,668.7	42.4	8.5	0.0	0.0	0.0	0.8	0.0	0.0	0.6
2004	10,155.8	73.3	0.7	4.0	0.0	0.0	0.5	0.0	0.0	0.7
2005	10,319.8	81.0	72.5	10.8	3.7	0.0	0.0	0.2	0.1	1.4
2006	9,703.6	73.5	68.3	0.0	0.1	2.8	0.2	1.3	0.0	0.7
2007	10,743.4	26.0	33.8	0.0	0.0	0.0	0.1	0.1	0.9	0.0

\* Includes: China, France, Italy, Netherlands, Philippines, Singapore, Switzerland, United Arab Emirates, United Kingdom.