9. Data Exchange Requirements for 2004

Purpose

To determine the data exchange requirements for 2004.

Background

Data must be exchanged each year amongst members and the Secretariat in order to provide information required for fisheries indicators, stock assessments, and management procedure work.

The precise information to be exchanged will vary on an annual basis depending on what work and analyses are planned. Therefore the data exchange requirements for 2004 will need to be determined once a proposed work schedule has been developed.

In the interim, a set of tentative data exchange requirements has been proposed in Attachment A. These requirements are divided into three components:
1. Standard fishery data that is recommended to be exchanged every year.
2. Fisheries indicator data that was exchanged in 2003 and depending on the proposed work plan, might need to be exchanged in 2004.
3. Data that will be needed for driving the catch-control rule of the selected management procedure. The details of the data required for this work will need to be defined at the meeting.

Prepared by the Secretariat

(1) Standard Fishery Data for the 2003 calendar year
Data listed in the following table should be provided for the complete 2003 calendar year. These data are due by 30 April 2004.

The catch effort and size data should be provided in the identical format as last year. If the format of the data provided be a member is changed, then the new format and some test data in that format must be provided to the Secretariat by 31 January 2003 to allow development of data loading routines

An update of data for recent years should be provided when there have been changes in those data. However, in cases where the historic time series of data has been revised, then the revised data should be provided by 31 January 2004 to allow time for consideration of those data and amalgamation into the CCSBT database.

Type of Data to provide	Data Provider(s)	Description of data to provide[1]
Catch and Effort	all members	Catch (in numbers and weight) and effort data can be provided as either shot by shot or as aggregated data. The maximum level of aggregation is by year, month, fleet, gear, and 5x5 degree (longline fishery) or 1x1 degree for surface fishery. A template showing the required information is provided in Attachment B.
RTMP catch and effort data	Japan	The catch and effort data from the real time monitoring program should be provided in the same format as the standard logbook data is provided.
Raised catch data (or raising rule)	Australia New Zealand Korea	Aggregated raised catch data should be provided at a similar resolution as the catch and effort data. This can be provided either as raised data, or by providing a "rule" by which the Secretariat can calculate raised catches from catch and effort data. Japan and Taiwan do not need to provide anything here because they provide raised catch and effort data.
Size Data	all members	Raised size composition data should be provided at an aggregation of year, month, fleet, gear, and 5x5 degree. Data should be provided in the finest possible size classes (1 cm). For members who cannot raise their size data in accordance with CCSBT agreed procedures, they should provide raw size data (individual length/weight measurement data) at the same level of resolution. A template showing the required information is provided in Attachment C.
Total catch by Fleet	all members	Raised total catch (weight and number) and number of boats fishing by fleet and gear. These data need to be provided for both the calendar year and the quota year.
SBT import statistics	Japan	Weight of SBT imported into Japan by country, fresh/frozen and month. These import statistics are used in estimating the catches of non-member countries.

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[1] It is accepted that there will be cases where this information cannot be provided because it has not been collected in the specified manner or because it is not readily available in the format required.

(2) Fisheries Indicator Data
These data are due by 30 April 2004 unless otherwise specified.

Type of Data to provide	Data Provider(s)	Description of data to provide
Longline fishery nominal CPUE	Japan New Zealand Korea Taiwan	Japan: CPUE for 3 separate age groups (4-7, 8-11, 12+) from RTMP data for 1995-2003. New Zealand: CPUE (all ages), disaggregated by fleet for 1989-2003. Korea: CPUE (all ages) for 1991-2003. Taiwan: CPUE (all ages) for 1995-2003[2].
Japanese Longline CPUE by cohort	Japan	CPUE for 3 separate age groups (4-7, 8-11, 12+) from logbook data for 1969-2002 and RTMP data for 2003. Also provide CPUE trends overtime for the 3,4,5,6,7 and 8 cohorts as was provided for the 2003 data exchange.
Total catch, effort and estimated age composition in Australian surface fishery	Australia	Total catch and effort per quota year in the purse seine fishery from 1994/95 to 2002/03, providing search hours, n. shots, estimated and actual catch (t), n. catch vessels, n. one degree squares fished, sets using spotter planes, sets in conjunction with pole boats and Mean estimated % of school caught. Age composition data to be provided from 2000 to 2003
Other catch at age data	?	Is there a requirement for catch at age data for fisheries other than the Australian surface fishery and the Indonesian LL fishery?
Total Indonesian catch by month and % of Indonesian LL catch that is SBT	?	Annual estimates should be generated by spawning season (July to June) rather than calendar year, to be consistent with biology and the MP operating model fishery definition
Indonesian LL SBT age and size composition	Australia	Annual estimates of both the age and size composition should be generated by spawning season (July to June) rather than calendar year. Estimates will be shown the seasons from 1994/95 to 2002/03.
Estimate of total global SBT catch (mass)	Secretariat	Estimates of the annual calendar year catch mass of SBT by country from 1952 to 2003.
Acoustic estimates of age 1 off Western Australia	Japan	Index of age 1 abundance from acoustic surveys from 1995/96 to 2003/04
Aerial spotting data in the Great Australian Bight	Australia	Summary data of aerial flying activities from 2000/01 to 2002/03. Provide an indicator index from these data if sufficient data have been obtained.
Tag returns	Secretariat	Summary of the number of releases by project, release year and release cohort, with the number of recoveries per year in each of these groups.

(3) Data for the Management Procedure
If the CCSBT moves into implementation of a specific management procedure, that management procedure will require current data for driving the catch-control rule (as opposed to conditioning or estimating parameters). The data used to set catches would include the actual catches, CPUE and possibly age-composition information.

Further discussion of the MP data requirements, timeframes and responsibilities will need to be held during the SAG/SC to better define the associated data exchange requirements for 2004.

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[2] It has been noted that there was a problem with effort reporting by some vessels in the Taiwanese fleet, particularly after 1996 because it is based on the weekly report data. These data should be standardised or corrected if possible.

Template for Aggregated catch and effort data.

Notes: **(1) This information should be recorded for all commercial fishing that targeted SBT, or that caught SBT while targeting other species**

(2) Contact the Secretariat for details of the required codes

(3) You can provide catch data for multiple species by placing the catch of each species on a separate line and duplicating the "effort" information (the gray shaded columns) for each line. Alternatively, you may wish to add the catch of extra species as extra columns across this spreadsheet. If you choose this option, you will need to duplicate the last 6 columns (shaded in blue) for each species you add.

(4) If aggregating DATE to the month, you should enter the first day of the month as the date (e.g. enter Jan-02 as 01-Jan-02)

(5) If you do not record the SBT STAT_AREA_CODE, but are providing latitude and longitude, then you can leave the statistical area blank because the Secretariat can easily calculate this.

(6) The LATITUDE should be in decimal degrees with S<0 and N>0. The position you supply should be the northern border of the grid

(7) The LONGITUDE should be in decimal degrees with W<0 and E>0. The position you supply should be the western border of the grid

(8) The field "N_DAYS_SEARCHED" should be considered optional until we agree on a standard method for estimating this.

(9) Certain fields are only required for certain gear types. When a field is only required for a few gear types, the codes of the required gear types are listed in **red**

(10) GEAR_LENGTH should be provided in metres, as total length of net set for PS and GILL, and as total length of line for LL.

(11) GEAR_DEPTH should be provided in metres, as net depth for PS and GILL, and line depth for LL. However, this should only be provided if all shots used the same depth. In this case, provide the single depth of the net/line, NOT the sum of the depths for all shots.

(12) SPOTTER_TYPE_CODE should only be provided if a single code applied to all shots in the record.

(13) *Important*: If fishing was conducted in the aggregated strata, but nothing was caught (or if no "relevant" species were caught), then you must record the fishing effort information, and specify the CATCH_SPECIES as "NIL". In this case, all the other catch fields would be left empty.

(14) WEIGHT_RETAINED is the whole weight of fish (of the relevant species) retained in kilograms.

(15) CONVERSION_FACTOR is the value by which processed weights were multiplied to estimate the whole weight.

(16) SCALING_FACTOR is the amount by which a sample weight was multiplied to calculate the weight retained. This is "1" if no scaling was required.

| | | | | | | | | | | | | | | | | | | | | Details of the catch of a species | | | | | |
| DATE | COUNTRY_CODE | FLEET_CODE | GEAR_CODE | TARGET_SPECIES | STAT_AREA_CODE | LATITUDE | LONGITUDE | N_BOATS | N_DAYS_SEARCHED Optional - see point "8" | N_DAYS_FISHED | N_SETS_SHOTS (GILL,LL,MWT,PS,TRAP) | N_HOOKS (LL,TROL,HAND) | N_BASKETS (LL) | N_HOURS (TROL & desirable for all methods) | GEAR_LENGTH see point "10" (PS,GILL, optional for LL) | GEAR_DEPTH see point "11" (PS,GILL, optional for LL) | SPOTTER_TYPE_CODE (PS,BB) | NUMBER_OF_POLES (BB) | CATCH_SPECIES | WEIGHT_RETAINED | CONVERSION_FACTOR | SCALING_FACTOR | NUMBER_RETAINED | NUMBER_DISCARDED |

Template for Shot by Shot catch and effort data.

Notes: **(1) This information should be recorded for all commercial fishing that targeted SBT, or that caught SBT while targeting other species**

(2) Contact the Secretariat for details of the required codes

(3) You can provide catch data for multiple species by placing the catch of each species on a separate line and duplicating the "effort" information (the gray shaded columns) for each line. Alternatively, you may wish to add the catch of extra species as extra columns across this spreadsheet. If you choose this option, you will need to duplicate the last 6 columns (shaded in blue) for each species you add.

(4) For DATETIME, provide either the date & time at the start of the shot, or just the date. The date/time should be provided in the format DD-MON-YY:HH:MI (e.g 15-Jan-01:16:05)

(5) If you do not record the SBT STAT_AREA_CODE, but are providing latitude and longitude, then you can leave the statistical area blank because the Secretariat can easily calculate this.

(6) The LATITUDE can be noon position, start of shot, end position, and should be in decimal degrees with S<0 and N>0. The position you supply should be the northern border of the grid

(7) The LONGITUDE can be noon position, start of shot, end position, and should be in decimal degrees with W<0 and E>0. The position you supply should be the western border of the grid

(8) The field "N_DAYS_SEARCHED" should be considered optional until we agree on a standard method for estimating this.

(9) VESSEL_ID should be a unique identifier for the vessel. This can be a registration number, or a unique vessel key that hides the true identity of the vessel etc..

(10) Certain fields are only required for certain gear types. When a field is only required for a few gear types, the codes of the required gear types are listed in **red**

(11) GEAR_LENGTH should be provided in metres, as total length of net set for PS and GILL, and as total length of line for LL.

(12) GEAR_DEPTH should be provided in metres, as net depth for PS and GILL, and line depth for LL.

(13) *Important*: If fishing was conducted, but nothing was caught (or if no "relevant" species were caught), then you must record the fishing effort information, and specify the CATCH_SPECIES as "NIL". In this case, all the other catch fields would be left empty.

(14) WEIGHT_RETAINED is the whole weight of fish (of the relevant species) retained in kilograms.

(15) CONVERSION_FACTOR is the value by which processed weights were multipled to estimate the whole weight.

(16) SCALING_FACTOR is the amount by which a sample weight was multiplied to calculate the weight retained. This is "1" if no scaling was required.

| | | | | | | | | | | | | | | | | | | Details of the catch of a species | | | | | |
| DATETIME | COUNTRY_CODE | FLEET_CODE | GEAR_CODE | TARGET_SPECIES | STAT_AREA_CODE | LATITUDE | LONGITUDE | N_DAYS_SEARCHED Optional - see point "8" | VESSEL_ID | N_HOOKS (LL,TROL,HAND) | N_BASKETS (LL) | N_HOURS (TROL & desirable for all methods) | GEAR_LENGTH see point "11" (PS,GILL, optional for LL) | GEAR_DEPTH see point "12" (PS,GILL, optional for LL) | SPOTTER_TYPE_CODE (PS,BB) | NUMBER_OF_POLES (BB) | CATCH_SPECIES | WEIGHT_RETAINED | CONVERSION_FACTOR | SCALING_FACTOR | NUMBER_RETAINED | NUMBER_DISCARDED |

Template for Catch at Size data.

Notes: **(1) You should provide adjusted (raised and substituted according to agreed CCSBT protocols) catch at size data. If you are not able to adjust your raw data, then you should provide the raw (individual) length (and weight) data. Notes below in blue relate specifically to the provision of raw measurement data.**

(2) Contact the Secretariat for details of the required codes

(3) If aggregating CAPTURE_DATE to the month, you should enter the first day of the month as the date (e.g. enter Jan-02 as 01-Jan-02). If aggregating to the half month, you should enter the first half month with a day of "1" and the second half month with a day of "16".

(4) If you do not record the SBT STAT_AREA_CODE, but are providing latitude and longitude, then you can leave the statistical area blank because the Secretariat can easily calculate this.

(5) The field "OTHER_AREA_CODE" should be completed where appropriate (e.g. Australia should record the State where these fish were captured)

(6) The LATITUDE should be in decimal degrees with S<0 and N>0. The position you supply should be the northern border of the grid

(7) The LONGITUDE should be in decimal degrees with W<0 and E>0. The position you supply should be the western border of the grid

(8) LENGTH_CLASS is the lower end of the length class in centimetres. For raw measurement data, simply record the length of the particular fish.

(9) WEIGHT is only relevant when raw (individual measurements) size data is provided, in which case, it is the weight of the fish in kilograms. When length frequency data is provided, the weight should be left empty.

(9) CLASS_PRECISION is the size of the length class in millimetres. This is not relevant (so leave empty) for raw measurement data.

(10) FREQUENCY_RAW. For raw measurement data, this should be "1". Otherwise, this is the number of SBT in this length class that were actually measured including any SBT that were measured in other units (e.g. weight) and placed in this length class after a conversion to length (i.e. this includes numbers reported in the next field).

(11) FREQUENCY_RAW_CONVERTED. In most cases, this will be zero. It is the number of SBT that have been placed in this length class after a conversion from different units (such as weight).

(12) FREQUENCY_ADJUSTED is the actual adjusted (raised and substituted) number of SBT in this length class. Because this is a calculated value, often involving small fractions of fish, this should be reported as a real number with up to six decimal places. Naturaly, this field should be left empty for raw measurement data.

CAPTURE_ DATE	COUNTRY_ CODE	FLEET_ CODE	GEAR_ CODE	STAT_ AREA_ CODE	OTHER_ AREA_ CODE	LATITUDE	LONGITUDE	LENGTH_ CLASS	WEIGHT	CLASS_ PRECISION (=class size)	FREQUENCY_ RAW	FREQUENCY_ RAW_ CONVERTED	FREQUENCY_ ADJUSTED