### IOTC STANDARD FORMATS FOR DATA DISSEMINATION

### IOTC secretariat

#### **ABSTRACT**

The number of requests for IOTC data received at the Secretariat has been increasing during the past years. These requests refer especially to data from the Nominal Catches database and, less frequently, to Catch and Effort and/or Size Frequency statistics. These are usually generic requests, where only the type of data and period sought are specified.

The Secretariat, on the other hand, has been providing the scientists attending the different Working Parties with up-to-date datasets, either before or during the meetings.

To give consistency to the different data disseminated the Secretariat decided early this year to create standard formats for data dissemination, at least for the data most routinely requested. The data are extracted through store procedures specific to each database and the final datasets saved as excel or text files depending on their size. The files due for dissemination are either self-explanatory, including details regarding the structure and codes used, or are sent along with specific files where this information is provided.

#### NOMINAL CATCHES

Nominal catch data are disseminated in a single excel spreadsheet. The data included in the different worksheets of the spreadsheet is summarized in the Table below:

Worksheet	Description
ReadMe	Summary of what the other worksheets contain
Catches	Catches per Fleet, Area, Gear, Gear and Species in the Nominal Catches database
Quality	Quality codes assigned to each individual record (according to the strata defined above) after Validation and Verification at the Secretariat
Sources	Source reporting each individual record according to the strata defined in Catches
CodeFleets	English and French names corresponding to each Special fleet code in the NCDB Tables
CodeSpecies	English, French and Scientific names corresponding to each Species code in the NCDB Tables
CodeGears	English and French names corresponding to each Gear code in the NCDB Tables
CodeSources	English and French names corresponding to each Source code in the NCDB Tables
CodeQuality	English and French names corresponding to each Quality code in the NCDB Tables

More information regarding the data contained in this spreadsheet can be found in Annex I.

The IOTC Nominal Catches data is also disseminated in electronic format, using an FAO FishStat type database, through the IOTC Website or in paper, yearly as the Data Summary.

#### CATCH AND EFFORT DATA

Catch and Effort data are disseminated in three different text files, depending on the type of data:

File	Description
CEPSBB.txt	Includes the catch and effort data available for purse seiners and baitboats
CELL.txt	Includes the catch and effort data available for longliners
CEOTHR.txt	Includes the catch and effort data available for other gears (gillnets, lines and unclassified gears)

The structure of the datasets and codes used in these files is included in an excel spreadsheet sent along with the files. This spreadsheet includes also a summary of all data available in the IOTC Catch and Effort database. Below is a summary of the information in the spreadsheet.

Worksheet	Description
NOTES	Summary of what the other worksheets contain
CESUMMARY	Summary of the data available in the IOTC Catch and Effort database by fleet, gear and year
CEPSBB	Structure of the file CEPSBB.txt
CELL	Structure of the file CELL.txt
CEOTHR	Structure of the file CEOTHR.txt
CodeFleet	Description of the Fleet codes recorded in CEPSBB.txt, CELL.txt and CEOTHR.txt
CodeGear	Description of the Gear codes recorded in CEPSBB.txt, CELL.txt and CEOTHR.txt
CodeEffort	Description of the Type of Effort codes recorded in CEPSBB.txt, CELL.txt and CEOTHR.txt and priorities given: a unique effort Unit is kept per stratum when more than one is recorded in the database
CodeIrrGrid	Description of the Irregular Grid codes recorded in CEPSBB.txt, CELL.txt and CEOTHR.txt; these usually refer to ports, fishing districts, atolls, EEZs, etc.
CodeSource	Description of the Source codes recorded in CEPSBB.txt, CELL.txt and CEOTHR.txt
CodeQuality	Description of the Quality codes recorded in CEPSBB.txt, CELL.txt and CEOTHR.txt

More information regarding the data contained in this spreadsheet can be found in Annex II.

### SIZE FREQUENCY DATA

Size data are disseminated per species, in text files. The structure of the datasets and codes used in these files is included in an excel spreadsheet sent along with the files. This spreadsheet includes also summaries of all data available in the IOTC Size Frequency Statistics database per species group. Below is a summary of the information in the spreadsheet.

Worksheet	Description
NOTES	Summary of what the other worksheets contain
SFSUMTT	Tropical Tuna species: Summary of the data available in the IOTC Size Frequency database by species, fleet, gear, year and school type
SFSUMTE	Temperate Tuna species: Summary of the data available in the IOTC Size Frequency database by species, fleet, gear, year and school type
SFSUMB	Billfish species: Summary of the data available in the IOTC Size Frequency database by species, fleet, gear, year and school type
SFSUMNE	Neritic Tuna species: Summary of the data available in the IOTC Size Frequency database by species, fleet, gear, year and school type
CodeSpecies	Description of the Fleet codes recorded in SFSUMTT, SFSUMTE, SFSUMB & SFSUMNE
CodeFleet	Description of the Fleet codes recorded in <b>SFSUMTT, SFSUMTE, SFSUMB &amp; SFSUMNE</b> and species text files
CodeGear	Description of the Gear codes recorded in CEPSBB.txt, CELL.txt and CEOTHR.txt
CodeMeas	Description of the Type of measurement codes recorded in <b>SFSUMTT</b> , <b>SFSUMTE</b> , <b>SFSUMB &amp; SFSUMNE</b> and species text files
CodeIrrGrid	Description of the Irregular Grid codes recorded in <b>SFSUMTT</b> , <b>SFSUMTE</b> , <b>SFSUMB &amp; SFSUMNE</b> and species text files; these usually refer to ports, fishing districts, atolls, EEZs, etc.
CodeSource	Description of the Source codes recorded in <b>SFSUMTT, SFSUMTE, SFSUMB &amp; SFSUMNE</b> and species text files
CodeQuality	Description of the Quality codes recorded in <b>SFSUMTT, SFSUMTE, SFSUMB &amp; SFSUMNE</b> and species text files

More information regarding the data contained in this spreadsheet can be found in Annex III.

## Annex I: Nominal Catches: Standard format for data dissemination (excel spreadsheet)

## **Reporting of Nominal Catch Data**

The following worksheets include:

Nominal Catches Database (NCDB)

Catches Catches per Fleet, Area, Gear, Gear and Species in the Nominal Catches database

Quality Quality codes assigned to each individual record (according to the strata defined above) after

Validation and Verification at the Secretariat

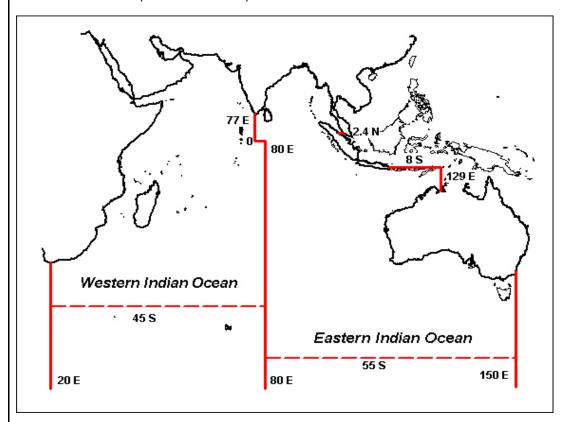
Sources Source reporting each individual record according to the strata defined in Catches

#### **Data Codes**

**CodeFleets** English and French names corresponding to each Special fleet code in the NCDB Tables **CodeSpecies** English, French and Scientific names corresponding to each Species code in the NCDB Tables

CodeGears English and French names corresponding to each Gear code in the NCDB Tables
 CodeSources English and French names corresponding to each Source code in the NCDB Tables
 CodeQuality English and French names corresponding to each Quality code in the NCDB Tables

The IOTC Areas are represented in the map below:



ReadMe

Example of data in	worksheet Catc	hes															
Fleet EName  NEI-DFRZ NEI-Deep-freezing  NEI-DFRZ NEI-Deep-freezing  NEI-DFRZ NEI-Deep-freezing  NEI-DFRZ NEI-Deep-freezing  NEI-DFRZ NEI-Deep-freezing  NEI-DFRZ NEI-Deep-freezing	Area Year G IO_Eastern 1985 LL IO_Eastern 1987 LL IO_Eastern 1988 LL IO_Eastern 1989 LL IO_Eastern 1990 LL	MT MT MT MT MT MT MT MT MT	ALB BET  3 61 264 488 251 427 459 1,069 570 1,146 112 1,267	SKJ SWO 1 0 10 0 79 1 78 7 265 9 308 4 166	188 673 1	1 4 4 25 5 23 1 58 7 58	12 68 65 133 134 52	FRZ KAV	<b>у к</b> дх	LOT	MLS NTAD 20 156 118 161 144 26	SBF	SFA	SKH	SSP	TUN TUX 0 0 0 0 7	WAH
Example of data in	worksheet Qual	ity															
Fleet EName NEI-DFRZ NEI-Deep-freezing NEI-DFRZ NEI-Deep-freezing NEI-DFRZ NEI-Deep-freezing NEI-DFRZ NEI-Deep-freezing NEI-DFRZ NEI-Deep-freezing	IO_Eastern 1985 I IO_Eastern 1986 I IO_Eastern 1987 I IO_Eastern 1988 I IO_Eastern 1989 I	L MT L MT L MT L MT	ALB BET S  1 1 1 1 1 1 1 1 1 1	SKJ SWO Y  1 1 1 1 1 1 1 1 1 1 1	FT BILL  1 1 1 1 1 1 1 1 1 1	BLM B 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	FRZ KAW	/ KGX	LOT	MLS NTAD  1 1 1 1 1 1 1	SBF	SFA	sкн	SSP	TUN 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	WAH
Example of data in	worksheet Sour	ces															
Fleet EName NEI-DFRZ NEI-Deep-freezing NEI-DFRZ NEI-Deep-freezing NEI-DFRZ NEI-Deep-freezing NEI-DFRZ NEI-Deep-freezing NEI-DFRZ NEI-Deep-freezing	Area         Year         G           IO_Eastern         1985 LI           IO_Eastern         1986 LI           IO_Eastern         1987 LI           IO_Eastern         1988 LI           IO_Eastern         1989 LI           IO_Eastern         1989 LI	MT MT MT MT	IOTC IOTC I IOTC IOTC I IOTC IOTC I IOTC IOTC I	OTC IOTC IGOTC IGOTC IOTC IOTC IOTC IOTC IOTC IOTC IOTC I	FT BILL DTC IOTC DTC IOTC DTC IOTC DTC IOTC DTC IOTC DTC IOTC	IOTC III	BLZ COM OTC OTC OTC OTC OTC	FRZ KA	V KGX	LOT	MLS NTAD IOTC IOTC IOTC IOTC IOTC	SBF	SFA	SKH	SSP	TUN TUX IOTC IOTC IOTC	WAH

## Annex II: Catch and Effort: Standard formats for data dissemination

### IOTC Catch and Effort Database

The IOTC catch and effort data is presented in three text files:

CEPSBB.txt: Includes the catch and effort data available for purse seiners and baitboats

CELL.txt: Includes the catch and effort data available for longliners

CEOTHR.txt: Includes the catch and effort data available for other gears (gillnets, lines and unclassified gears)

The following fields are common to all files:

	T-1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1						
	Fleet The code of the fleet (see CodeFleet and below for specs.)						
Special fleet	codes:						
Fleet	Flag/s recorded	English Name	Description				
FRA-MAY	France	France-Territories	Catches reported by France as being from vessels based in its overseas territories in the Indian Ocean.				
FRA-REU	France	France-Reunion	Catches reported by France as being from vessels based in Reunion.				
NEI-ICE NEI-IDN	'Taiwan,China', Honduras	NEI-Fresh Tuna, NEI-Indonesia Fresh Tuna	Catches by small, fresh-tuna longliners operating under various flags, mainly from Taiwan, China. Catches estimated by the IOTC Secretariat from various sources (IOTC Sampling Programmes, historical information from plant operators, etc.).				
NEI-SUN	Belize, Panama	NEI-Ex-Soviet Union	Catches of purse-seine vessels operating under various flags and monitored by scientists from the former USSR until 1991 and from Russia until 1995. Formerly reported as Liberia or Cayman Islands, currently under Belize or Panama flag.				
NEI-EUR	Netherlands Antilles, Belize, Panama, Italy	NEI-European	Catches of purse-seine vessels flying various non-European flags and monitored and reported by European scientists. One Italian vessel is included in this category as it is the only purse seiner under				
NEI-DFRZ	Honduras, Belize, Equatorial Guinea, Panama	NEI-Deep-freezing	Catches of non-reporting longline vessels, estimated by the IOTC Secretariat using, in most cases, the number of vessels operating per year. Most of them are recorded operating under Honduras, Belize, Panama or Equatorial Guinea flag.				
NEI		Not Elsewhere Included	Any other catches not included above or under other fleets.				

Gear	The code of the gear (see GearCode for specs.)	
Year		
MonthStart	The time interval (minimum is one month)	
MonthEnd		
Grid	This field reads as follows:	
	Numeric Grids: Refer to Regular Areas.	Text Grids: Refer to Irregular Areas, e.g. areas around islands or

Example for the 50	square 200 to	250 IN and 60	0 10 030 E.
SIZE	QUADRANT	LATITUDE	LONGITUDE
O.L.L	Q0/15/17/11	2,	20.10.1022
6	1	20	60
U		20	00

SIZE: Size of the rectangle used as unit of area. Use the following codes:

Rectangle size	Code
1° * 1°	5
5° * 5°	6
5° * 10°	1
10° * 20°	2
10° * 10°	3
20° * 20°	4

QUADRANT: Major geographic quadrants divided by the Equator (latitude o) and the Greenwich parallel (longitude 0o)[in the Indian Ocean, only 1



ATITUDE / LONGITUDE: Indicate the latitude (two digits) and longitude

Text Grids: Refer to Irregular Areas, e.g. areas around islands or atolls, seas adjacent to ports, country districts, etc.

See CodeIrrGrid for details

three digits) of the corner of the square closest to 0o latitude and 0o ongitude.

The total effort recorded in the strata concerned in the units referred to in Effort Units The units the effort is recorded. A single effort unit is kept per strata when more than one was available. The criteria followed for the selection and the effort units involved can be found in CodeEffort

QualityCode The quality assigned to the effort records after validation of the datasets (see CodeQuality for specs.) The source reporting the data (see CodeSource for specs.)

**NOTES** 

## Annex II: cont.

The worksheets CEPSBB, FCELL and CEOTHR include the explanation for the codes specific to each file.

The worksheet CESUMMARY summarizes what is available as catch and effort statistics at the IOTC database including:

Fleet (as above) Gear Gear (as above)

Year Year

Period Month (time interval in number of months) TypeArea Type of Area (IOTC refering to irregular areas)

EffortUnits Units of Effort (as above)

BET SKJ ALB SBF

swo MARL Species which catches are recorded ( X when catches are recorded ); all codes as in CodeSpecies but STUN, referring to all small tuna species (FRZ, KAW, FRI, BLT, etc.)

STUN SEER TUX NTAD

Units under which the catches are recorded ( X when catches are recorded; t referring to weight in tonnes, n to number of specimens); catches

recorded both in number of specimens and weight are not additive

Free Log

Type of School (FS referring to free schools, LS to log associated schools and Unkn to Unknown or unclassified schools)

Unkn Source

Validation Refers to whether the use of the data is recommended (YES) or not (NO) after validation at the IOTC Secretariat

### **NOTES**

## Fields specific to File CELL.txt

YFT-NO	Catches of yellowfin tuna recorded in number of specimens
YFT-MT	Catches of yellowfin tuna recorded in weight (tonnes)
BET-NO	Catches of bigeye tuna recorded in number of specimens
BET-MT	Catches of bigeye tuna recorded in weight (tonnes)
ALB-NO	Catches of albacore recorded in number of specimens
ALB-MT	Catches of albacore recorded in weight (tonnes)
SBF-NO	Catches of southern bluefin tuna recorded in number of specimens
SBF-MT	Catches of southern bluefin tuna recorded in weight (tonnes)
SWO-NO	Catches of swordfish recorded in number of specimens
SWO-MT	Catches of swordfish recorded in weight (tonnes)
BLM-NO	Catches of black marlin recorded in number of specimens
BLM-MT	Catches of black marlin recorded in weight (tonnes)
BLZ-NO	Catches of Indo-Pacific blue marlin recorded in number of specimens
BLZ-MT	Catches of Indo-Pacific blue marlin recorded in weight (tonnes)
MLS-NO	Catches of striped marlin recorded in number of specimens
MLS-MT	Catches of striped marlin recorded in weight (tonnes)
SFA-NO	Catches of Indo-Pacific sailfish recorded in number of specimens
SFA-MT	Catches of Indo-Pacific sailfish recorded in weight (tonnes)
SSP-NO	Catches of short-billed spearfish recorded in number of specimens
SSP-MT	Catches of short-billed spearfish recorded in weight (tonnes)
BILL-NO	Catches of billfish nei recorded in number of specimens
BILL-MT	Catches of billfish nei recorded in weight (tonnes)
TUX-NO	Catches of tuna and tuna-like species nei recorded in number of specimens
TUX-MT	Catches of tuna and tuna-like species nei recorded in weight (tonnes)
NTAD-NO	Catches of non-targeted, associated and/or dependent species recorded in number of specimens (includes sharks)
NTAD-MT	Catches of non-targeted, associated and/or dependent species recorded in weight (tonnes) (includes sharks)

NOTE: Catches recorded in number and weight within a same strata are not additive

# Fields specific to File CEPSBB.txt

CatchUnits	
YFT-FS	Catches of yellowfin tuna recorded under free schools
YFT-LS	Catches of yellowfin tuna recorded under logs
YFT-UNCL	Catches of yellowfin tuna no recorded under specific schools
BET-FS	Catches of bigeye tuna recorded under free schools
BET-LS	Catches of bigeye tuna recorded under logs
BET-UNCL	Catches of bigeye tuna no recorded under specific schools
SKJ-FS	Catches of skipjack tuna recorded under free schools
SKJ-LS	Catches of skipjack tuna recorded under logs
SKJ-UNCL	Catches of skipjack tuna no recorded under specific schools
ALB-FS	Catches of albacore recorded under free schools
ALB-LS	Catches of albacore recorded under logs
ALB-UNCL	Catches of albacore no recorded under specific schools
SBF-FS	Catches of southern bluefin tuna recorded under free schools
SBF-LS	Catches of southern bluefin tuna recorded under logs
SBF-UNCL	Catches of southern bluefin tuna no recorded under specific schools
LOT-FS	Catches of longtail tuna recorded under free schools
LOT-LS	Catches of longtail tuna recorded under logs
LOT-UNCL	Catches of longtail tuna no recorded under specific schools
FRZ-FS	Catches of frigate and bullet tuna recorded under free schools
FRZ-LS	Catches of frigate and bullet tuna recorded under logs
FRZ-UNCL	Catches of frigate and bullet tuna no recorded under specific schools
KAW-FS	Catches of kawakawa recorded under free schools
KAW-LS	Catches of kawakawa recorded under logs
KAW-UNCL	Catches of kawakawa no recorded under specific schools
COM-FS	Catches of narrow-barred Spanish mackerel recorded under free schools
COM-LS	Catches of narrow-barred Spanish mackerel recorded under logs
COM-UNCL	Catches of narrow-barred Spanish mackerel no recorded under specific schools
TUX-FS	Catches of tuna and tuna-like species nei recorded under free schools
TUX-LS	Catches of tuna and tuna-like species nei recorded under logs
TUX-UNCL	Catches of tuna and tuna-like species nei no recorded under specific schools
NTAD-FS	Catches of non-targeted, associated and/or dependent species recorded under free schools (includes sharks)
NTAD-LS	Catches of non-targeted, associated and/or dependent species recorded under logs (includes sharks)
NTAD-UNCL	Catches of non-targeted, associated and/or dependent species no recorded under specific schools (includes sharks

# Fields specific to File CEOTHR.txt

	YFT-NO	Catches of yellowfin tuna recorded in number of specimens
	YFT-MT	Catches of yellowfin tuna recorded in weight (tonnes)
	BET-NO	Catches of bigeye tuna recorded in number of specimens
	BET-MT	Catches of bigeye tuna recorded in weight (tonnes)
	SKJ-NO	Catches of skipjack tuna recorded in number of specimens
	SKJ-MT	Catches of skipjack tuna recorded in weight (tonnes)
	ALB-NO	Catches of albacore recorded in number of specimens
	ALB-MT	Catches of albacore recorded in weight (tonnes)
	SBF-NO	Catches of southern bluefin tuna recorded in number of specimens
	SBF-MT	Catches of southern bluefin tuna recorded in weight (tonnes)
	LOT-NO	Catches of longtail tuna recorded in number of specimens
	LOT-MT	Catches of longtail tuna recorded in weight (tonnes)
	FRZ-NO	Catches of frigate and bullet tuna recorded in number of specimens
	FRZ-MT	Catches of frigate and bullet tuna recorded in weight (tonnes)
	KAW-NO	Catches of kawakawa recorded in number of specimens
	KAW-MT	Catches of kawakawa recorded in weight (tonnes)
	COM-NO	Catches of narrow-barred Spanish mackerel recorded in number of specimens
	COM-MT	Catches of narrow-barred Spanish mackerel recorded in weight (tonnes)
	SWO-NO	Catches of swordfish recorded in number of specimens
	SWO-MT	Catches of swordfish recorded in weight (tonnes)
	BILL-NO	Catches of billfish nei recorded in number of specimens
	BILL-MT	Catches of billfish nei recorded in weight (tonnes)
	TUX-NO	Catches of tuna and tuna-like species nei recorded in number of specimens
	TUX-MT	Catches of tuna and tuna-like species nei recorded in weight (tonnes)
l	NTAD-NO	Catches of non-targeted, associated and/or dependent species recorded in number of specimens (includes sharks)
l	NTAD-MT	Catches of non-targeted, associated and/or dependent species recorded in weight (tonnes) (includes sharks)

NOTE: Catches recorded in number and weight within a same strata are not additive

### Example of data in worksheet CESUMMARY

Fleet	Gear	Year Period(Months)	TypeArea	EffortUnits YF	-T	BET	SKJ	ALB	SBF	swo	MARL	STUN	SEER	TUX	NTAD	t	n	Free	Log	Unkn	Source	UseRec
Philippines	LL	1998	1 GRID5x5	DAYS	Χ	Χ		X		X	X				Χ	Χ	Х			X	LOAR	NO
Philippines	LL	1999	1 GRID5x5	DAYS	Χ	Χ		X		X	X				Χ	Χ	Х			X	LOAR	NO
Philippines	LL	2000	1 GRID5x5	DAYS	Χ	X		X								Χ	Х			X	LOAR	NO
Philippines	LL	2001	1 GRID5x5	DAYS	Χ	X		X		Х	X				X	Χ	Χ			X	LOAR	NO

### Example of data in **CEPSBB.txt**

"Fleet", "Gear", "Year", "MonthStart", "MonthEnd", "Effort", "EffortUnits", "QualityCode", "Source", "CatchUnits", "YFT-LS", "YFT-LS", "YFT-UNCL", "BET-FS", "BET-LS", "BET-UNCL", "SKJ-FS", "SKJ-UNCL", "ALB-FS", "ALB-LS", "ALB-UNCL", "SBF-FS", "SBF-LS", "SBF-UNCL", "LOT-FS", "LOT-LS", "LOT-UNCL", "FRZ-FS", "FRZ-UNCL", "KAW-FS", "KAW-LS", "KAW-UNCL", "COM -FS", "COM-LS", "COM-UNCL", "TUX-FS", "TUX-UNCL", "NTAD-FS", "NTAD-LS", "NTAD-UNCL"

"AUS","BB",1992,1,1,"6230130 ",403.00,"HRSRH","3","LO","MT",.....,573.50,......,573.50

"AUS","BB",1992,2,2,"6230130 ",366.00,"HRSRH","3","LO","MT",,,,,,,,3.30,,,272.10,,,,,,,,,,,,,

### Example of data in CELL.txt

"Fleet", "Gear", "Year", "MonthStart", "MonthEnd", "Grid", "EffortUnits", "QualityCode", "Source", "YFT-NO", "YFT-MT", "BET-NO", "BET-MT", "ALB-NO", "ALB-MT", "SBF-NO", "SBF-MT", "SWO-NO", "SWO-MT", "BLM -NO", "BLM -MT", "BLZ-NO", "BLZ-MT", "MLS-NO", "MLS-MT", "SFA-NO", "SFA-MT", "SSP-NO", "SSP-MT", "BILL-NO", "BILL-MT", "TUX-NO", "TUX-MT", "NTAD-NO", "NTAD-MT"

"AUS","LL",1992,2,2,"6235140 ",600.00,"HOOKS","3","LO",3.00,0.05,,,,,,,,,,,,,,,,,,,,,

"AUS","LL",1992,3,3,"6235130 ",900.00,"HOOKS","3","LO",,,,,,6.00,0.12,,,,,,,,,,,,

### Example of data in **CEOTHR.txt**

"Fleet", "Gear", "Year", "MonthStart", "MonthEnd", "Grid", "EffortUnits", "QualityCode", "Source", "YFT-NO", "YFT-MT", "BET-NO", "BET-MT", "SKJ-NO", "SKJ-MT", "ALB-NO", "ALB-MT", "SBF-NO", "SBF-MT", "LOT-NO", "LOT-MT", "FRZ-NO", "FRZ-MT", "KAW-NO", "KAW-MT", "COM-NO", "COM-MT", "SWO-NO", "SWO-MT", "BILL-NO", "BILL-MT", "TUX-NO", "TUX-MT", "NTAD-NO", "NTAD-MT"

"AUS", "HATR", 1994, 1, 1, "6240145", 11.00, "DAYS", "0", "LO", ...., 115.00, 0.61, .....

"AUS","HATR",1994,1,1,"All IO",8.00,"DAYS","0","LO",...,33.00,0.09,4.00,4.0e-03,11.00,0.17,...,34.00,0.11

# Annex III: Size Frequency Statistics: Standard formats for data dissemination

### IOTC Size Frequency Statistics Data

The IOTC size frequency data is presented in text format, the data referring to each species recorded in separate files:

The name of each file contains the Acronime SF (referring to size frequency data type) followed by the three-alpha code of the species concerned:

For example, SFYFT.txt: Includes the size frequency data available for the yellowfin tuna

The following fields are common to all files:

Fleet Special fleet		see CodeFleet and be	low for specs.)
Fleet	Flag/s recorded	English Name	Description
FRA-MAY	France	France-Territories	Size data reported by France from sampling on vessels based in its overseas territories in the Indian Ocean.
FRA-REU	France	France-Reunion	Size data reported by France from sampling on vessels based in Reunion.
NEI-ICE NEI-IDN	, ,		Size data recorded through the IOTC sampling schemes on fresh-tuna longliners operating under various flags, mainly from Taiwan,China.
NEI-EUR	Netherlands Antilles, Belize, Panama, Italy	NEI-European	Size data reported by European scientists from sampling on purse-seine vessels flying various non- European flags.

	Gear	The code of the gear (see CodeGear for specs.)
ı	Year	
	MonthStart	The time interval (minimum is one month)
	MonthEnd	
	Grid	This field reads as follows:
		Numeric Grids: Refer to Regular Areas Toyt Grids: Pofor to Irrogular Areas or a group glands or

square 20o to	25o N and 60	o to 65o E:
QUADRANT	LATITUDE	LONGITUDE
1	20	60
	_	square 200 to 250 N and 60 QUADRANT LATITUDE

SIZE: Size of the rectangle used as unit of area. Use the following codes:

Rectangle size	Code
1°*1°	5
5° * 5°	6
5° * 10°	1
10° * 20°	2
10° * 10°	3
20.0 * 20.0	4

QUADRANT: Major geographic quadrants divided by the Equator (latitude 0o) and the Greenwich parallel (longitude 0o)[in the Indian Ocean, only 1 and 2 will apply]:



LATITUDE / LONGITUDE: Indicate the latitude (two digits) and longitude (three digits) of the corner of the square closest to 0o latitude and 0o longitude.

Text Grids: Refer to Irregular Areas, e.g. areas around islands or atolls, seas adjacent to ports, country districts, etc.

See CodeIrrGrid for details

•	
Species	The three-alpha code of the species (see <b>CodeSpecies</b> for specs.)
School Type	The type of school, free school (FS), associated school (LS), unknown or unclassified (UNCL)
MeasureType	The type/s of measurement (see <b>CodeMeas</b> for specs.)
RaiseCode	Size data raised to total in the strata (SD), original sample kept (OS) or unknown (UNCL)
QualityCode	The quality assigned to each sample after validation of the datasets (see <b>CodeQuality</b> for specs.)
SampleSize	The total number of specimens measured in each strata. The sample size recorded for purse seiners (PS) monitored by European (ESP, FRA, NEI-
	EUR) and Sevenelles (SYC) scientists refers to the amount of catch sampled in relation to the total catch reported in each strata (in %o)
FirstClassLow	Size class to which the specimens recorded in C001 (see below) refer to according to the size interval recorded in SizeInterval below
SizeInterval	Size interval recorded for the strata in centimeters (length measurements) or kilograms (weight measurements)
C001Cxxx	Number of specimens per size class according to that specified in FirstClassLow and SizeInterval

**NOTES** 

# Annex III: cont.

The worksheets SFSUM\_ summarize what is available as size frequency data at the IOTC database for each species group:

SFSUMTT Tropical tuna species
SFSUMTE Temperate tuna species
SFSUMB Billfish species
SFSUMNE Neritic tuna species

See CodeSpecies for details on the species recorded within each group

The following information is provided in the summaries:

Species Species (as above)
Fleet Fleet (as above)
Gear Gear (as above)

**Year** Year

TimeInterval Time interval in number of months

TypeArea Type of Area (IOTC referring to irregular areas)

SchoolType Type of School (FS referring to free schools, LS to log associated schools and UNCL to Unknown or unclassified schools)

Source The source reporting the data (see CodeSource for specs.)

Measure The type/s of measurement: fork length (FL), unprocessed length (UL), round weight (RW) or unprocessed weight (UW)

Raised Size data raised to total in the strata (Yes), original sample kept or no information (No)

Validation Refers to whether the use of the data is recommended (YES) or not (NO) after validation at the IOTC Secretariat

SizeInterval Minimum size interval recorded for the strata in centimeters (length measurements) or kilograms (weight measurements)

SizeRange Difference between the maximum and minimum class recorded in each strata

MinSize Lowest size frequency recorded in the strata
MaxSize Highest size frequency recorded in the strata

### **NOTES**

Species	Fleet	Gear	Year TimeInterval	TypeArea	SchoolType	Source	Measure	Raised	Validation	SizeInterv	val	SizeRan	_	MinSize	MaxSize
BET	ESP	PS	1985	1 GRID5x5	FS	RNRI	FL	Yes	Yes	2		108		38	146
BET	ESP	PS	1985	1 GRID5x5	LS	RNRI	FL	Yes	Yes	2		82		36	118
BET	ESP	PS	1986	1 GRID5x5	FS	RNRI	FL	Yes	Yes	2		82		34	116
BET	ESP	PS	1986	1 GRID5x5	LS	RNRI	FL	Yes	Yes	2		52		34	86
BET	ESP	PS	1987	1 GRID5x5	FS	RNRI	FL	Yes	Yes	2		82		32	114
Example	ofsize	data for	Bigeye Tuna (BE)	Γ)											
•			Bigeye Tuna (BE	,											0000
Fleet Y	ear Month		thEnd Grid Gear Spe	cies SchoolType	MeasureType Ra		alityCode_Firs							C007 C008	
Fleet Y	ear Month		thEnd Grid Gear Spe 1 6200055 PS BET	cies SchoolType FS	FL SE	)	alityCode Firs	10	2	0 0	0	0 0	0	0007 C008 0 0	C009 —
Fleet Y ESP 1	ear Month 1985 1985		thEnd Grid Gear Spe 1 6200055 PS BET 1 6200055 PS BET	cies SchoolType FS LS	FL SI	)	alityCode Firs	10 10	2 2	0 0 0	0	0 0 0 0	0 0	0 0	
Fleet Y ESP 1 ESP 1	ear Month 1985 1985		thEnd Grid Gear Spe 1 6200055 PS BET 1 6200055 PS BET 1 6205055 PS BET	cies SchoolType FS LS FS	FL SI FL SI	) ) )	alityCode Firs	10 10 10	2 2 2	0 0 0 0 0 0	0 0 0	0 0 0 0 0 0	0 0 0		
Fleet Y ESP 1 ESP 1 ESP 1	ear Month 1985 1985		thEnd Grid Gear Spe 1 6200055 PS BET 1 6200055 PS BET	cies SchoolType FS LS	FL SI	) ) )	alityCode Firs	10 10	2 2	0 0 0	0	0 0 0 0	0 0	0 0	