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**PROPOSED REVISIONS TO THE PROCEDURES FOR THE PROVISION OF DATA**

**WCPFC-SC3-ST SWG/WP-3**

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# PROPOSED REVISIONS TO THE PROCEDURES FOR THE PROVISION OF DATA

## Introduction

Procedures for “Scientific Data to be Provided to the Commission” were recommended by the Scientific Committee at its first regular session in August 2005 (see Annex VII, Report of the Statistics Specialist Working Group, in the report of SC1) and adopted by the Commission at its second regular session in December 2005. These procedures concern the provision of estimates of annual catches, the numbers of vessels active, catch and effort data, and size composition data.

The procedures were implemented following WCPFC2, and since that time, certain inconsistencies in the text have come to light. Further, at its third regular session in December 2006, the Commission adopted measures related to the provision of data that need to be incorporated into the procedures. In response to these developments, and in accordance with section 9 of the procedures, which states that “[t]he Commission, through its Scientific Committee, shall periodically review the requirements for scientific data and shall provide the Commission with revised versions of this recommendation, as appropriate,” proposed revisions to the procedures for the provision of data are presented in the Appendix and are discussed below.

## Proposed Revisions

### 1. Estimates of annual catches

The English names of bigeye, skipjack and yellowfin have been modified to reflect the standards of the Aquatic Sciences and Fisheries Information System (ASFIS).

Striped marlin and swordfish are covered in the second bullet point; references to striped marlin and swordfish in the first bullet point are therefore redundant and have been removed.

The inclusion of Pacific bluefin tuna was decided at the third regular session of the Commission in December 2006 and has therefore been included in the second bullet point.

### 2. Number of vessels active

Reference to the number of trollers in the WCPFC Statistical Area has been added to be consistent with the other major gear types, and references to the number of trollers active during the fishing season have been reformatted for consistency.

### 3. Operational level catch and effort data

The “Standards for the Provision of Operational Level Catch and Effort Data” have been moved to an annex of “Scientific Data to be Provided to the Commission”, and the reference modified accordingly.

Reference to ‘unraised longline catch and effort data stratified by the number of hooks between float’ has been moved to section 4 for consistency.

### 4. Catch and effort data aggregated by time period and geographic area

Reference to aggregated purse-seine catch and effort data by type of school association has been added, since these data are required for stock assessments.

Reference to ‘unraised longline catch and effort data stratified by the number of hooks between float’ has been moved to this section from section 3 for consistency.

A paragraph on the provision of aggregated catch and effort data covering distant-water longliners fishing to the east of the eastern boundary of the WCPFC Statistical Area has been added. The SC1 recommendation for the provision of aggregated catch and effort data referred only to the WCPFC Statistical Area, whereas the geographic area fished by distant-water longliners extends beyond the eastern boundary of the WCPFC Statistical Area. Prior to the establishment of the Commission, data covering distant-water longliners throughout the Pacific Ocean were provided to the SPC Oceanic Fisheries Programme on an annual basis and were used regularly to assess the stocks of albacore, bigeye and yellowfin. At the time of the drafting of the SC1 recommendations, it was anticipated that the WCPFC would develop an agreement for the exchange of data with the Inter-American Tropical Tunas Commission (IATTC), such that aggregated longline catch and effort data covering the area to the east of the WCPFC Statistical Area would be provided to the WCPFC by the IATTC on a regular basis. At present, a similar agreement exists between SPC and IATTC, and while aggregated catch and effort data have been exchanged under this agreement, the exchange of data has not been timely. Hence, for the sake of convenience and timeliness, it is proposed that the WCPFC adopt the procedure that was utilised by SPC prior to the establishment of the Commission, i.e., that aggregated catch and effort data covering distant-water longliners also be provided for the Pacific Ocean to the east of the eastern boundary of the WCPFC Statistical Area.

#### 5. Size composition data

Reference to the justification for the provision of size composition data has been deleted to be consistent with the style of the rest of the document.

Size composition data aggregated by year, rather than quarter or month, and not disaggregated by geographic area, have been provided to the Commission for certain fleets; however, size data at this level of resolution are not useful for assessment purposes. Therefore, text has been added to establish a minimum standard for the level of aggregation of size data.

#### 8. Definition of the WCPFC Statistical Area

The reference to the Indonesian ‘peninsula’ has been changed to ‘archipelago’.

#### Annex 1. Standards for the Provision of Operational Level Catch and Effort Data

“Standards for the Provision of Operational Level Catch and Effort Data”, which originally was a separate recommendation from SC1, has been appended as an annex to “Scientific Data to be Provided to the Commission”.

## Appendix

### Proposed Revisions to “Scientific Data to be Provided to the Commission”

#### 1. *Estimates of annual catches*

The following estimates of catches during each calendar year shall be provided to the Commission for each gear type:

- catches of bigeye tuna (*Thunnus obesus*), skipjack tuna (*Katsuwonus pelamis*), yellowfin tuna (*Thunnus albacares*), ~~striped marlin (*Tetrapturus audax*)~~, blue marlin (*Makaira mazara*), ~~and~~ black marlin (*Makaira indica*) ~~and swordfish (*Xiphias gladius*)~~ in (i) the WCPFC Statistical Area (see paragraph #8) and (ii) the portion of the WCPFC Statistical Area east of the 150° meridian of west longitude; and
- catches of albacore (*Thunnus alalunga*), striped marlin (*Tetrapturus audax*), ~~and~~ swordfish (*Xiphias gladius*) and Pacific bluefin tuna (*Thunnus orientalis*) in (i) the Pacific Ocean south of the Equator, (ii) the Pacific Ocean north of the Equator, (iii) the WCPFC Statistical Area north of the Equator, (iv) the WCPFC Statistical Area south of the Equator, and (v) the portion of the WCPFC Statistical Area east of the 150° meridian of west longitude.

For trollers targeting albacore in the Pacific Ocean south of the Equator, the following estimates of catches during the fishing season (July to June) should also be provided:

- catches of albacore in the Pacific Ocean south of the Equator.

Catch estimates shall also be provided for other species as determined by the Commission.

Estimates of discards should also be provided.

Longline catch estimates shall be for whole weight, rather than processed weight.

All catch estimates shall be reported in tonnes (i.e., metric tons).

The statistical methods that are used to estimate the annual and seasonal catches shall be reported to the Commission, with reference to the coverage rates for each type of data (e.g., operational catch and effort data, records of unloadings, species composition sampling data) that is used to estimate the catches and to the conversion factors that are used to convert the processed weight of longline-caught fish to whole weight.

#### 2. *Number of vessels active*

The number of vessels active in the WCPFC Statistical Area during each calendar year shall be provided to the Commission for each gear type.

For longliners, pole-and-line vessels and purse seiners, the number of vessels active shall be provided by gross registered tonnage (GRT) class. The GRT classes are defined as follows:

- Longline: 0–50, 51–200, 201–500, 500+
- Pole-and-line: 0–50, 51–150, 150+
- Purse seine: 0–500, 501–1000, 1001–1500, 1500+

For trollers targeting albacore, the number of vessels active during each calendar year shall be provided for (i) the WCPFC Statistical Area south of the Equator and (ii) the WCPFC Statistical Area north of the Equator. For trollers targeting albacore in the Pacific Ocean south of the Equator, the number of vessels active during the fishing season (July to June) shall be provided for (i) in the WCPFC Statistical Area south of the Equator and (ii) the Pacific Ocean south of the Equator during the fishing season (July to June), shall also be provided and should be provided for the Pacific Ocean south of the Equator.

### **3. Operational level catch and effort data**

Operational level catch and effort data (e.g., individual sets by longliners and purse seiners, and individual days fished by pole and line vessels and trollers) shall be provided to the Commission, in accordance with the standards to be established by the Commission listed in Annex 1.

It is recognised that certain members and cooperating non-members of the Commission may be subject to domestic legal constraints, such that they may not be able to provide operational data to the Commission until such constraints are overcome. Until such constraints are overcome, aggregated catch and effort data and size composition data as described in (4) and (5) below shall be provided. Unraised longline catch and effort data stratified by the number of hooks between floats and the finest possible resolution of time period and geographic area shall also be provided.

It is also recognised that certain members and cooperating non-members of the Commission may have practical difficulties in compiling operational data for fleets comprised of small vessels, such as certain sectors of the fisheries of Indonesia, the Philippines and small island developing States.

### **4. Catch and effort data aggregated by time period and geographic area**

If the coverage rate of the operational catch and effort data that are provided to the Commission is less than 100%, then catch and effort data aggregated by time period and geographic area that have been raised to represent the total catch and effort shall be provided. Longline catch and effort data shall be aggregated by periods of month and areas of 5° longitude and 5° latitude. Purse-seine catch and effort data shall be aggregated by periods of month, areas of 1° longitude and 1° latitude, and type of school association. Catch and effort data for other surface fisheries shall be aggregated by periods of month and areas of 1° longitude and 1° latitude.

If the coverage rate of the operational catch and effort data that are provided to the Commission is less than 100%, then unraised longline catch and effort data stratified by the number of hooks between floats and the finest possible resolution of time period and geographic area shall also be provided.

If the coverage rate of the operational catch and effort data that are provided to the Commission is less than 100%, then catch and effort data that have been raised to represent the total catch and

effort shall also be aggregated by periods of year and areas of national jurisdiction and high seas within the WCPFC Statistical Area.

Catch and effort data aggregated by periods of month and areas of 5° longitude and 5° latitude that have been raised to represent the total catch and effort, and unraised longline catch and effort data stratified by the number of hooks between floats and the finest possible resolution of time period and geographic area, covering distant-water longliners shall also be provided for the Pacific Ocean east of the western boundary of the WCPFC Statistical Area.

The statistical methods that are used to derive the aggregated catch and effort data shall be reported to the Commission, with reference to the coverage rates of the operational catch and effort data, and the types of data and method used to raise the catch and effort data.

#### **5. *Size composition data***

Length and/or weight composition data that are representative of catches by the fisheries ~~are essential for stock assessments and therefore~~ shall be provided to the Commission at the finest possible resolution of time period and geographic area and at least as fine as periods of quarter and areas of 20° longitude and 10° latitude.

#### **6. *The roles of flag states and coastal states***

Flag states or entities shall be responsible for providing to the Commission scientific data covering vessels they have flagged, except for vessels operating under joint-venture or charter arrangements with another state such that the vessels operate, for all intents and purposes, as local vessels of the other state, in which case the other state shall be responsible for the provision of data to the Commission.

It is recognised that the ability of flag States or entities to provide scientific data to the Commission may be constrained by the terms of bilateral or regional arrangements, such as the Treaty on Fisheries Between the Governments of Certain Pacific Island States and the Government of the United States of America.

Scientific data compiled by coastal states shall also be provided to the Commission.

#### **7. *Time periods covered and schedule for the provision of data***

Estimates of annual or seasonal catches should be provided to the Commission from 1950 onwards or, if the fleet began operating after 1950, from the year in which the fleet began operating.

Operational catch and effort data, and size composition data, should be provided for all years, starting with the first year for which the data are available.

For all gear types, except trollers targeting albacore in the Pacific Ocean south of the Equator, estimates of annual catches, the number of vessels active, catch and effort data, and size composition data, covering a calendar year should be provided by April 30 of the year following the calendar year (e.g., data covering calendar year 'x' should be provided by 30 April of year 'x+1').

For trollers targeting albacore in the Pacific Ocean south of the Equator, estimates of annual catches, the number of vessels active, catch and effort data, and size composition data, covering a fishing season (July to June) should be provided by April 30 of the year following the year in which

the season ends (e.g., data covering the season from July of year 'x' to June of year 'x+1' should be provided by 30 April of year 'x+2').

Estimates of annual catches, the number of vessels active, catch and effort data, and size composition data should be revised, and the revisions provided to the Commission, as additional data become available.

#### **8. *Definition of the WCPFC Statistical Area***

The WCPFC Statistical Area is defined as follows: from the south coast of Australia due south along the 141° meridian of east longitude to its intersection with the 55° parallel of south latitude; thence due east along the 55° parallel of south latitude to its intersection with the 150° meridian of east longitude; thence due south along the 150° meridian of east longitude to its intersection with the 60° parallel of south latitude; thence due east along the 60° parallel of south latitude to its intersection with the 130° meridian of west longitude; thence due north along the 130° meridian of west longitude to its intersection with the 4° parallel of south latitude; thence due west along the 4° parallel of south latitude to its intersection with the 150° meridian of west longitude; thence due north along the 150° meridian of west longitude; and from the north coast of Australia due north along the 129° meridian of east longitude to its intersection with the 8° parallel of south latitude, thence due west along the 8° parallel of south latitude to the Indonesian ~~peninsula~~archipelago; and from the Indonesian peninsula due east along the 2°30' parallel of north latitude to the Malaysian peninsula.

#### **9. *Periodic reviews of the requirements for scientific data***

The Commission, through its Scientific Committee, shall periodically review the requirements for scientific data and shall provide the Commission with revised versions of this recommendation, as appropriate.

## **Annex 1. Standards for the Provision of Operational Level** **Catch and Effort Data ~~to the Commission~~**

### *1. Data items that shall be reported to the Commission*

#### 1.1 Vessel identifiers, for all gear types

Name of the vessel, country of registration, registration number, international radio call sign: The registration number is the number assigned to the vessel by the State that has flagged the vessel. A code may be used as a vessel identifier instead of the name of the vessel, registration number and call sign for vessels that have fished and that intend to fish only in the waters of national jurisdiction of the State that has flagged the vessel.

#### 1.2 Trip information, for all gear types

The start of a trip is defined to occur when a vessel (a) leaves port after unloading part or all of the catch to transit to a fishing area or (b) recommences fishing operations or transits to a fishing area after transshipping part or all of the catch at sea (when this occurs in accordance with the terms and conditions of article 4 of Annex III of the Convention, subject to specific exemptions as per article 29 of the Convention).

Port of departure, date of departure, port of unloading, date of arrival in port of unloading: If the start of a trip coincides with recommencing fishing operations or transiting to a fishing area after transshipping part or all of the catch at sea, then “Transshipment at sea” shall be reported in lieu of the port of departure, and if the end of a trip coincides with transshipping part or all of the catch at sea, then “Transshipment at sea” shall be reported in lieu of the port of unloading.

#### 1.3 Information on operations by longliners

Activity: This item should be reported for each set and for days on which no sets were made, from the start of the trip to the end of the trip. Activities should include “a set”; “no fishing — in transit”; “no fishing — gear breakdown”; “no fishing — bad weather”; and “no fishing — in port”.

Date of start of set and time of start of set: The date and start of set time should be GMT/UTC. If no sets are made, the date and main activity should be reported.

Position of start of set: The position of start of set should be reported in units of at least minutes of latitude and longitude. If no sets are made, the noon position should be reported.

Number of hooks per set.

Number of branch lines between floats. The number of branch lines between floats should be reported for each set.

Number of fish caught per set, for the following species: albacore (*Thunnus alalunga*), bigeye (*Thunnus obesus*), skipjack (*Katsuwonus pelamis*), yellowfin (*Thunnus albacares*), striped marlin (*Tetrapturus audax*), blue marlin (*Makaira mazara*), black marlin (*Makaira indica*) and swordfish (*Xiphias gladius*), and other species as determined by the Commission.

If the total weight or average weight of fish caught per set have been recorded, then the total weight or average weight of fish caught per set, by species, should also be reported. If the total weight or average weight of fish caught per set have not been recorded, then the total weight or average weight of fish caught per set, by species, should be estimated and the estimates reported. The total weight or average weight shall refer to whole weights, rather than processed weights.

#### 1.4 Information on operations by pole-and-line vessels and related gear types

Activity: This item shall be reported for each day, from the start of the trip to the end of the trip. Activities should include “a day fishing or searching with bait onboard”; “no fishing — collecting bait”; “no fishing — in transit”; “no fishing — gear breakdown”; “no fishing — bad weather”; and “no fishing — in port”.

Date: The date should be GMT/UTC.

Noon position: The noon position should be reported in units of at least minutes of latitude and longitude.

Weight of fish caught per day, for the following species: albacore, bigeye, skipjack, yellowfin, and other species as determined by the Commission.

#### 1.5 Information on operations by purse-seiners and related gear types

Activity: This item shall be reported for each set and for days on which no sets were made, from the start of the trip to the end of the trip. Activities should include “a set”; “a day searched, but no sets made”; “no fishing — in transit”; “no fishing — gear breakdown”; “no fishing — bad weather”; and “no fishing — in port”.

Date of start of set, time of start of set and time of end of set: The date and time of the start of set and the time of end of set should be GMT/UTC. If no sets are made, the date and main activity should be reported.

Position of set or noon position: If a set is made, then the position of the set shall be reported. If searching occurs, but no sets are made, then the noon position shall be reported. The position should be reported in units of at least minutes of latitude and longitude.

School association: All common types of school association should be reported, while uncommon types of association should be reported as “other”. Common types of school association are “free-swimming” or “unassociated”; “feeding on baitfish”; “drifting log, debris or dead animal”; “drifting raft, FAD or payao”; “anchored raft, FAD or payao”; “live whale”; and “live whale shark”.

Weight of fish caught per set, for the following species: albacore, bigeye, skipjack, yellowfin, and other species as determined by the Commission.

#### 1.6 Information on operations by trollers and related gear types

Activity: This item shall be reported for each day, from the start of the trip to the end of the trip. Activities should include “a day fished”; “no fishing — in transit”; “no fishing — gear breakdown”; “no fishing — bad weather”; and “no fishing — in port”.

Date: The date should be GMT/UTC.

Noon position: The noon position should be reported in units of at least minutes of latitude and longitude.

Number of fish caught per day, for the following species: albacore, bigeye, skipjack, yellowfin, and other species as determined by the Commission.

If the total weight or average weight of fish caught per day have been recorded, then the total weight or average weight of fish caught per day, by species, should also be reported. If the total weight or average weight of fish caught per day have not been recorded, then the total weight or average weight of fish caught per day, by species, should be estimated and the estimates reported. The total weight or average weight shall refer to whole weights, rather than processed weights.

**2. *Geographic area to be covered by operational catch and effort data to be provided to the Commission***

The geographic area to be covered by operational catch and effort data to be provided to the Commission shall be the WCPFC Statistical Area, except for fisheries targeting albacore in the Pacific Ocean south of the Equator, for which the geographic area should be the Pacific Ocean south of the Equator.

**3. *Target coverage rate for operational catch and effort data to be provided to the Commission***

The target coverage rate for operational catch and effort data to be provided to the Commission is 100%.

**4. *Procedures for the verification of operational catch and effort data***

Operational catch and effort data should be verified as follows:

- The amount of the retained catch should be verified with records of unloading obtained from a source other than the crew or owner or operator of the fishing vessel, such as an agent of the company responsible for unloading or onward shipping or purchasing of the catch.
- Positions of latitude and longitude should be verified with information obtained from vessel monitoring systems.
- The species composition of the catch should be verified with sampling conducted by observers during fishing operations or by port samplers during unloading.