STEPS TO CALCULATE YOUR
ANNUAL CATCH ESTIMATES
FOR INDUSTRIAL FISHERIES
(for year **2022**)

PURSE SEINE

STEP 1. **Do you have an industrial purse seine tuna fleet fishing in the WCPFC Area ?**

- ▪ Yes: Go to STEP 2.
- ▪ No: Go to **Longline part**

STEP 2. **PURSE SEINE NATIONAL FLEET**

a. VESSEL LIST

Produce a list of all <u>purse seine</u> vessels in your tuna fleet that were active during the year studied. <u>This should include any CHARTERED vessels,</u> and include the GRT (Gross Registered Tonnage).

- ▪ Check your vessel list
  - – **T2 report #3176** "NATIONAL FLEET - Purse Seine distinct vessels in WCPFC Area"
  - – <u>Make sure all vessels in your fleet(s) appear in these reports and check on other vessels that should not be in your fleet(s)</u>
  - – Email us (emmanuels@spc.int) or **Slack (@manu_SPC)** if some fixing has to be made on your vessel list under TUFMAN2

- ▪ Produce a <u>breakdown of the number of purse seine vessels by SIZE class</u>, and to enter this into your ANNUAL CATCH ESTIMATES Excel template (second tab).
  - – **T2 report #2910**

b. TRIP LIST CHECKS

<u>Ensure ALL logsheets have been provided to you for the year studied.</u> This should be achieved before you complete and submit your PART 1 report at the end of June.

- ▪ Check on missing logsheets:
  - – **T2 report #3057** "NATIONAL FLEET – Missing Purse Seine logsheet in WCPFC Area"

If you have VMS data available in TUFMAN 2 (i.e. FFA member country), go to STEP 3.

If you do not have VMS data available in TUFMAN 2 (i.e. non-FFA member country), then you will need to determine the underlined actual number of trips conducted and this can then be used in place of the VMS Trips in the STEPs 3 through 6.

Once you have the value(s) for the actual trips undertaken, go to STEP 3.

STEP 3. ACE Excel TEMPLATE (LOGSHEET DATA)

1.LOGSHEET section of your Purse Seine ACE Excel template

Fill in the table from running the TUFMAN2 report below. If you do not use the TUFMAN 2 system to enter and store your data, go to STEP 8.

- If you have a national PURSE SEINE fleet, run **T2 Report #3051** "NATIONAL FLEET - Purse seine - Key species catches in WCPFC Area raised with VMS".
  - Save the output as CSV or XLS files where relevant and review with SPC before transferring the information into your XLS template.
  - Before transferring to template, open CSV in Excel and sort first 2 column, to get the same order than in the template (Excel->Data-Sort)
  - Use the XLS template provided for each fleet. Transfer the information from the CSV report into the respective areas of the TEMPLATE.
    To do so, only copy/paste 'values' to keep the Excel template formatting.

Video tutorial on CSV copy into Excel template:
HTTP://BIT.LY/ACE-TUTO

Once completed, go to STEP 4 to produce observer-based estimates of the key species.

STEP 4. ACE Excel TEMPLATE (OBSERVER DATA)

2.OBSERVER and **3.SUMMARIES** sections of your Purse Seine ACE Excel template

The logsheet-reported estimates of the key species and the discards are acknowledged to be under-reported, so you will need to compare the key shark species and discard estimates produced from STEP 3 with estimates determined from observer data, if the observer data coverage is adequate.

To do this, run the following reports:

- **T2 report #3171** "PURSE SEINE -- LONGLINE -- WCPFC key species catch and discard/release used to produce estimate for Part 1 Report".
  Copy data from report into the Excel template, section 2. OBSERVER DATA:
  - Save the output as CSV or XLS files where relevant

- Open the generated CSV and order data by category and species (DATA->sort), in order to have the categories and species in the same order than in the XLS template
- Use the XLS template provided for each fleet. Transfer the information from the CSV report into the respective areas of the TEMPLATE. To do so, only copy & paste the 'values' to keep the XLS template formatting.

- **T2 report #3168** "COVERAGE: Purse Seine Observer Coverage" – The output from this report is needed to raise the data extracted from above point.
  Data to be copy/pasted (or typed) directly (manually) from TUFMAN2 report into XLS template, section 3. SUMMARIES

- Go to STEP 5

STEP 5. CATCH ESTIMATES – choosing the right calculation METHOD

> Select the best ACE calculations methods to calculate your annual RETAINED catch and DISCARDED catch estimates

As a rule of thumb, use the following guidelines according to the methods listed in the XLS templates:

a. **Method #3** is normally the best for the retained catches of **target tuna species** in the longline fishery [ALB, BET and YFT]
b. **Method #4** is normally the best for the retained catches of **target tuna species** in the purse seine fishery [SKJ, YFT and BET]
c. **Method #2** is normally the best for the retained catch of **other species** and the discards of all species for both fisheries.

For purse seine, only consider **method 1 or 2** for retained target species when observer coverage is greater than 70%. If not, then use **method 3 or 4**, and review with SPC.

Once you have determined the best estimates calculation method, then review with SPC.

LONGLINE

STEP 1. Do you have a LONGLINE industrial tuna fleet fishing in the WCPFC Area ?

- Yes Go to STEP 2.
- No **Your work is done!**

STEP 2. LONGLINE NATIONAL

a. FLEET VESSEL LIST

> Produce a list of all <u>longline</u> vessels in your tuna fleet that were active during the studied year. This should <u>include any CHARTERED vessels,</u> and include the GRT (Gross Registered Tonnage).

- Check your vessel list
    - Run **T2 report #3175** "NATIONAL FLEET - Longline distinct vessels in WCPFC Area"
    - Make sure all vessels in your fleet(s) appear in these reports and check on other vessels that should not be in your fleet(s)
    - Email us (emmanuels@spc.int) or **Slack (@manu_SPC)** if some fixing has to be made on your vessel list under TUFMAN2

- Produce a <u>breakdown of the number of longline vessels by SIZE class</u>, and to enter this into your ANNUAL CATCH ESTIMATES (ACE) Excel template (2nd tab):
    - Run **T2 report #2907**

b. TRIP LIST CHECKS

> <u>Ensure ALL logsheets have been provided</u> to you. This should be achieved before you complete and submit your PART 1 report at the end of June

- Check on missing logsheets:
    - **T2 report #3059** "NATIONAL FLEET – Missing Longline logsheet in WCPFC Area"

If you have VMS data available in TUFMAN 2 (i.e. FFA member country), go to STEP 3.

If you do not have VMS data available in TUFMAN 2 (i.e. non-FFA member country), then you will need to determine the <u>actual number of trips conducted</u> and this can then be used in place of the VMS Trips in the STEPs 3 through 6.

Once you have the value(s) for the actual trips undertaken, go to STEP 3.

STEP 3. ACE Excel TEMPLATE (LOGSHEET DATA)

> **1.LOGSHEET** section of your Longline ACE Excel template

Fill in the table from running the TUFMAN2 report below.

If you do not use the TUFMAN 2 system to enter and store your data, go to STEP 8.

- If you have a national LONGLINE fleet, <u>run</u> the **T2 report #3050** "NATIONAL FLEET - Longline - Key species catches in WCPFC Area raised with VMS".
    - – Save the output as CSV or XLS files.
    - – Open CSV in Excel and <u>sort first 2 column</u>, to get the same order than in the template (Excel->Data-Sort)
    - – Transfer the information from the CSV report into the respective areas of the TEMPLATE. To do so, only copy & paste 'values' to keep the XLS template well formatted.

> **Video tutorial on CSV copy into Excel template:**
> **HTTP://BIT.LY/ACE-TUTO**

Once completed, go to STEP 4 to produce observer-based estimates of the key species.

STEP 4. ACE Excel TEMPLATE (OBSERVER DATA)

> **2.OBSERVER** and **3.SUMMARIES** sections of your Longline ACE Excel template
>
> The logsheet-reported estimates of the <u>key species</u> and the <u>discards</u> are acknowledged to be under-reported, so you will need to compare the key shark species and discard estimates produced from STEP 3 with estimates determined from observer data, <u>if the observer data coverage is adequate</u>.

To do this, run the following reports:

- **T2 report #3170** "LONGLINE -- WCPFC key species catch and discard/release used to produce estimate for Part 1 Report".
  Data to be copied in XLS template, section **2. OBSERVER DATA**:
    - – Save the output as CSV or XLS files where relevant
    - – Open the generated CSV and <u>order data by category and species</u> (DATA->Sort), in order to have the categories and species in the same order than in the XLS template
    - – Transfer the information from the CSV report into the respective areas of the Longline TEMPLATE. To do so, only copy & paste the 'values' to keep the XLS template well formatted.

- **T2 report #2986** "COVERAGE: Longline Observer Coverage" – The output from this report will be needed to raise the data extracted from above (2.OBSERVER).
  Data to be copy/pasted (or typed) <u>directly (manually) from report into XLS template</u>, section **3. SUMMARIES**

- Go to STEP 5

STEP 5. CATCH ESTIMATES – choosing the right METHOD

> Select the best ACE calculations methods to calculate your annual RETAINED catch and DISCARDED catch estimates

As a rule of thumb, use the following guidelines according to the methods listed in the XLS templates:

a. **Method #3** is normally the best for the retained catches of target tuna species in the longline fishery [ALB, BET and YFT]
b. **Method #4** is normally the best for the retained catches of target tuna species in the purse seine fishery [SKJ, YFT and BET]
c. **Method #2** is normally the best for the retained catch of other species and the discards of all species for both fisheries.

Once you have determined the best ACE calculation method to use, then review with SPC.

Go to STEP 6.

COMPLETING YOUR ESTIMATES

STEP 6. Do any of your national LONGLINE fleets fish in the following areas?

(i)   the Pacific Ocean beyond the WCPFC Area
(ii) the Pacific Ocean to the east of 150°W
(iii) Both north and south of the equator in the WCPFC Area

— Yes Go to STEP 7.
— No -> **Your work is done!**

STEP 7. To produce the reports from other broad ocean areas, run the following DORADO reports

> Generate reports for other broad ocean areas, if your fleet is operating in these other areas

T2 report #3083 "LONGLINE catches by species in the NORTH / SOUTH Pacific OCEAN"
T2 report #3084 "LONGLINE catches by species in the WCPO Area"
T2 report #3085 "LONGLINE catches by species in the NORTH / SOUTH WCPFC Area"

The outputs from these reports can be reviewed with SPC

Your work is done!

STEP 8. **Please see the SPC representative to work through your estimates.**