STEPS TO CALCULATE YOUR ANNUAL CATCH ESTIMATES FOR INDUSTRIAL FISHERIES
(for 2020)

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 purse seine vessels in your tuna fleet that were active during the year studied. This should include any CHARTERED vessels, and include the GRT (Gross Registered Tonnage).

- Check your vessel list against relevant DORADO reports, such as …
  - **DORADO - TUFMAN - RECON - report #2.1.5** "NATIONAL FLEET - Purse Seine 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

- This validated vessel list will then lead you to produce a breakdown of the number of purse seine vessels by SIZE class, and to enter this into your ANNUAL CATCH ESTIMATES Excel template (second tab).
  - **DORADO – TUFMAN - Regional reporting – report #3b**

b. TRIP LIST CHECKS

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

- Use the following reports to check on missing logsheets:
  - **DORADO TUFMAN RECON report #2.1.1** "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 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)

Fill in the 1.LOGSHEET section of your Purse Seine ACE Excel template

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

- If you have a national PURSE SEINE fleet, <u>run</u> the **DORADO TUFMAN RECON report #2.1.3** "NATIONAL FLEET - Purse seine - Key species catches in WCPFC Area raised with VMS" in the RECON menu.
    - 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 <u>sort first 2 column</u>, if not in 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 'values' to keep the XLS template formatting.

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

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

STEP 4. ACE Excel TEMPLATE (OBSERVER DATA)

Fill in the 2.OBSERVER and **3.SUMMARIES** sections of your Purse Seine 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 **DORADO TUBS** reports:

- **PURSE SEINE Menu – Report #31** "PURSE SEINE -- 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 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 the 'values' to keep the XLS template formatting.

- **ADMIN Menu – Report #51** "COVERAGE: Purse Seine Observer Coverage" – The output from this report will be required to raise the data extracted from above point.
  Data to be copy/pasted (or typed) <u>directly from DORADO report into XLS template</u>, section 3. SUMMARIES

- Go to <mark>STEP 5</mark>

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

Once you have determined the best estimates to use, then review with SPC before transferring the information into your ANNUAL CATCH ESTIMATES Ms Word template.

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 against relevant DORADO reports, such as …
  - **DORADO – TUFMAN - RECON report #2.2.5** "NATIONAL FLEET - Longline 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

- This validated vessel list will then lead you to 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):
  - **DORADO – TUFMAN - Regional reporting – report #3a**

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

- Use the following reports to check on missing logsheets:
  - **DORADO TUFMAN RECON report #2.2.1** "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 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)

Fill in the 1.LOGSHEET section of your Longline ACE Excel template

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 **DORADO TUFMAN RECON report #2.2.3** "NATIONAL FLEET - Longline - Key species catches in WCPFC Area raised with VMS" in the RECON menu.
  - 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 <u>sort first 2 column</u>, if not in 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 'values' to keep the XLS 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)

Fill in the 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 **TUBS DORADO** reports:

- **LONGLINE Menu – Report #31** "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

- 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 the 'values' to keep the XLS template formatting.

- **ADMIN Menu – Report #50** "COVERAGE: Longline Observer Coverage" – The output from this report will be required to raise the data extracted from above point A.
  Data to be copy/pasted (or typed) <u>directly from DORADO 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 estimates to use, then review with SPC before transferring the information into your ANNUAL CATCH ESTIMATES Ms Word template.

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

TUBS Reports - LONGLINE – Report #41 "LONGLINE catches by species in the NORTH / SOUTH Pacific OCEAN"
TUBS Reports - LONGLINE – Report #42 "LONGLINE catches by species in the WCPO Area"
TUBS Reports - LONGLINE – Report #43 "LONGLINE catches by species in the NORTH / SOUTH WCPFC Area"

The outputs from these reports can be reviewed with SPC before transferring the information into your ANNUAL CATCH ESTIMATES template.

Your work is done!

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