# South Pacific Regional Fisheries Management Organisation

# **DRAFT**

# SC-01-INF-01 Scientific Committee's Jack Mackerel working group web meeting 1

July 11, 2013

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# **Meeting summary**

A web-meeting on the jack mackerel subgroup was held on July 11, 2013 (Seattle time) which lasted about 1.5 hours.

Most participants were able to hear and speak, apologies to those with technical difficulties. The main idea was to get the ball rolling (uphill as it is!).

#### Discussion points

Below summarizes the discussion with tentative lead responsibilities as needed for participants.

- 1. Consider Annex L for SC meeting planning (see section below in entirety)
- 2. Add Polish and Ukrainian catches from FAO area 87 to Fleet 4

3. Add Cook Islands catches to fleet 3

(Craig)

4. Retain the area-split and models—data compilation

(Jorge Csirke)

5. EU studies on management and stock structure

(Niels) (Ecuador)

(Craig)

6. Ecuadorian reports on jack mackerel studies

(Ecuació)

7. CPUE data updates

(Gang Li, Cristian)

- 8. Develop rationale and proposals for age-specific natural mortality treatment—e.g., whether to estimate, assumed fixed, or other proposal. (*Cristian, Ricardo*)
- 9. Age-growth and otolith structures and data

(Geoff, Rodolfo)

10. Resolve issue of using Peruvian mean wt-at-age

(Cristian, Jorge)

11. New acoustic and DEPM data

(Aquiles, Ricardo)

- a. Peruvian document on method used (since it is novel)
- b. Summary of DEPM time series (i.e., spatial coverage etc)
- 12. Adopt the github site for modeling and code versioning following instructions from Niels in section below (*Jim and Niels*)
- 13. Develop a structured assessment document

(Jim)

14. Develop a 2-page advice sheet

(Niels)

### New data to be evaluated for use in the 2013 jack mackerel assessment

The following lists possible new data to be updated and used in the coming assessment:

- Catch biomass (updated through August 2013, projection needed through December 2013)
- Catch-at-age data (?)
- CPUE from Chinese fleet
- CPUE from C-S Chilean fleet
- Acoustic data from Peruvian waters
- 2012 DEPM point estimate
- Ecuadorian research on biology

### Annex L—Roadmap for the Scientific Committee

Article 10 of the SPRFMO Convention establishes the Scientific Committee (SC), whose functions are, in summary, to:

- a) plan, conduct and review scientific assessments of the status of fishery resources;
- b) provide advice and recommendations to the Commission and its subsidiary bodies based on such assessments;
- c) provide advice and recommendations to the Commission and its subsidiary bodies on the impact of fishing on the marine ecosystems in the Convention Area;
- d) encourage and promote cooperation in scientific research; and
- e) provide such other scientific advice to the Commission and its subsidiary bodies as it considers appropriate.

The Science Working Group (SWG) established by the Preparatory Conference for the SPRFMO developed a Research Programme which is part of the Report of the 11 th Science Working Group held in 2012. The Commission endorses this programme and requests the Scientific Committee to prioritise activities and regularly update this programme. Collaboration between different organizations, Members and Non-Members is fundamental to develop research.

The Commission also endorses the recommendations of the SWG regarding the following matters of procedure, as needed:

- a) To set up a Stock Assessment Working Group (SAG).
- b) To extend the duration of the future Scientific Committee meetings to a total of 7 days in order to accommodate the work of the SAG;
- c) To elaborate a protocol for delivering information and documents to the Scientific Committee, considering a minimum of 30 days for the submission of that information and documents in order to allow the Committee a time for review.

Regarding the scientific advice for 2014 on Jack Mackerel stock status, the Commission endorses the short term priorities as defined in the report of the 11<sup>th</sup> SWG Meeting. In addition to these priorities, the Commission requests the Scientific Committee to:

- a) Update and further develop the stock assessment of Jack Mackerel based on the agreed methods from the SWG;
- b) Continue the work on evaluating alternative hypotheses on Jack mackerel stock population structure and consequences of alternative management approaches. In this context, and pending more conclusive findings on the stock population structure of Jack Mackerel, continue and expand the stock assessment work under both the stock hypotheses considered in the 11<sup>th</sup> SWG Meeting;
- c) Recommend biologically-based target and limit reference points or their proxies, including the values associated with maximum sustainable yield (MSY). If analyses are incomplete then interim target and limit reference points (or proxies) should be provided.
- d) Consider a range of exploitation levels and present the probabilities that the spawning stock biomass will reach target and limit reference points in 2015, and also 10 and 20 years into the future. In the absence of a target reference point, provisional values shall be used.
- e) Elaborate and evaluate other conservation measures (beyond catch limits) to the Commission that could be adopted as part of a rebuilding plan for jack mackerel.

Regarding the impact of fisheries on the marine ecosystem and the Ecosystem Approach to fisheries management, the Commission requests the SC:

- f) To evaluate the impact of fishing activities on Ecologically or Biologically Significant Marine Areas (EBSAs) described in the Convention area and on Vulnerable Marine Ecosystems (VMEs) identified by the Scientific Committee within the Area of the Convention.
- g) To review international best practices in bycatch and incidental catches (seabirds, marine mammals and reptiles) mitigation options in pelagic and bottom fisheries and make the appropriate recommendations.
- h) To review the standards for data collection and reporting, and for observer coverage to ensure a full understanding of the nature and extent of bycatch interactions across all fisheries.

The Commission requests the Members and Non Members to provide the necessary experts to the SC to address this roadmap and its specific requests.

## **Meeting Record**

Agree

For an audio record of the meeting please see:

https://github.com/jimianellil/jack mackerel/tree/master/Docs/WebMeetings (right-click on files you may wish to download) Jim (4:46 AM): Good morning Gang LI (4:47 AM): Hi jim, what's the deadline for China to hand in the Standardized CPUE data of 2012? Gang LI (4:50 AM): If the deadlline is confirmed, I will be do it as soon as possible befor it Jim (4:50 AM): Great! Jim (4:50 AM): We'll see when others will be able to finalize data Gang LI (4:51 AM): Aquiles (4:57 AM): Good morning Jim and everyone, I can hear you perfectly kwonyj (5:09 AM): yes no problem! thanks. Jim (5:11 AM): Any questions before we start? kwonyj (5:11 AM): Dr. Choi's system has some problem..can't listen...but it's ok.. Jim (5:12 AM): I will try to hit key points here Cristian Canales to Jim (5:14 AM): Are you recording this? Jim (5:16 AM): Yes, slide 4; Are there any plans for alternative assessments? Question if separate area-assessments will be done as in last year? IMARPE'S TEAM IN LIMA (5:18 AM): we would like to repeat the separate stock assessment done last year Jim (5:19 AM): Agree one versus separate should be carried forward; regarding alternatives, Peru (IMARPE) had done some in the past, some alternatives may be presented Cristian Canales to Jim (5:20 AM): We should discuss this after or not? Jorge Csirke (5:24 AM): Yes, and if we do so we will submit them through this group well in advance Robin to Jim (5:27 AM): Colleagues from Ecuador have offerred papers on biological data Hintzen, Niels (5:31 AM): Will there be the more general national report presentations? Jim (5:36 AM): Yes, national reports are on the draft agenda Ad (5:39 AM): Could we use some preliminary data for 2013 Cristian Canales (5:39 AM): A question scenario 0.4 Jim (5:41 AM): Far north fleet mean wt at age impact on fishing mortality--lower numbers due to higher body mass Hintzen, Niels (5:42 AM): And how about the new acoustic survey from the Peruvians, as under North 0 and 1, can we use that in the combined model too? Cristian Canales (5:45 AM): Hintzen, Niels (5:47 AM): should we schedule a slot during the meeting to discuss this? Cristian Canales (5:48 AM): I agree Geoff Tingley (Geoff) (5:48 AM): There were some specific reference point requests from the Commission Meeting in January last. Jim (5:48 AM):

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Cristian Canales (5:48 AM):
We should include some space to discuss more about this
Jim (5:54 AM):
polish catch question?
IMARPE'S TEAM IN LIMA (5:55 AM):
we agree
Jim (5:55 AM):
that it belongs in fleet 4?
IMARPE'S TEAM IN LIMA (5:56 AM):
yes for those years
Ligang (5:57 AM):
yes
Jim (5:57 AM):
Polish and Ukraine catch to fleet 4
Cristian Canales (5:57 AM):
all is for F4
Ligang (5:57 AM):
agree
Ricardo Oliveros-Ramos (6:02 AM):
Jim
Hintzen, Niels (6:03 AM):
Ricardo, will you use it in the combined, or only in the North model?
Cristian Canales (6:03 AM):
cool,.. may we have a document of this before the meeting=
Jim (6:04 AM):
Yes, report to SC should be available
Geoff Tingley (Geoff) (6:08 AM):
NZ has some limited information on aging.
Cristian Canales (6:13 AM):
New improvements of JJM
Ricardo Oliveros-Ramos (6:18 AM):
I mean, for us to make commits to the git
ok, perfect
Cristian Canales (6:20 AM):
Hintzen, Niels (6:20 AM):
Jim, I'd like to launch the idea of creating an 2-page advice sheet only
Hintzen, Niels (6:20 AM):
I'm happy to take the lead there, but would like others to be involved too of course
Ricardo Oliveros-Ramos (6:20 AM):
yes, for all the libraries to plot an analysis the outputs
Ricardo Oliveros-Ramos (6:24 AM):
Ok it'll nice to see it so we don't duplicate efforts
Hintzen, Niels (6:25 AM):
yeah, for sure Ricardo and I will be in contact on this
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#### GitHub howto

GitHub is a web-based hosting service for software development projects. GibHub allows the Science Committee to share documents, assessment codes and results, which are all under version control, with read access for everyone (being able to commit documents needs additional permission). The full suite of folders and documents together is called a repository.

These documents and codes are stored 'in the cloud' and one can decide to either make a local copy on their own computer (by checkout of the repository) or access the files online via <a href="https://github.com">https://github.com</a>. In the latter case, changes to the content are available online immediately and visible to everyone. When working on assessment codes and data however, it is often useful to work from a local copy first, and 'upload' or 'commit' these changes afterwards, thereby updating the files that are stored online.

To access the GitHub Jack Mackerel repository, you need to navigate to: <a href="https://github.com/SPRFMO/jack\_mackerel">https://github.com/SPRFMO/jack\_mackerel</a>. Already you can navigate through the Docs and Code available from last year's Science Working Group. If you want to contribute to the collection of documents and codes you would need a GitHub account. Sign up for github (free) here: <a href="https://github.com/signup/free">https://github.com/signup/free</a>. The owners of the repository can add you as a committer which allows you to add and modify files.

Modifying and adding files can be done in two ways as mentioned before. Directly at the web interface or via a local checkout of the repository.

#### Via web interface:

- Navigate to the file you wish to modify. Once the file is open, on the top right a button 'Edit' will appear.
- Edit the file
- Write a short message on your modifications at the 'Commit summary' below and press the green button: Propose File Change

#### Via local copy:

- To obtain the repository, Tortoise git (software) works well. <a href="https://code.google.com/p/tortoisegit/">https://code.google.com/p/tortoisegit/</a>
- Once you've installed this software, create a folder on your personal computer you want to commit to the repository to, E.g. C:/SPRFMO\_SC/
- Right-click on the 'SPRFMO SC' folder and a menu will appear which lists git update
- You will be asked for an url, where you should fill out: https://github.com/SPRFMO/jack\_mackerel
- Leave all other settings as they are and click OK. At that moment, all content already available in the repository will be copied to your local folder
- You can now work on these files offline. If you made a change you wish to commit, simply rightclick the file or folder and select 'Commit' from the menu. A few screens will guide you through the process.
- Make sure you update the repository each time you want to modify anything yourself, others might
  have updated the file before you and your local copy is not up-to-date anymore! Do this by rightclicking the SPRFMO\_SC folder and select 'Update' from the menu