SIOFA Stock Assessment Working Group

Terms of Reference

Chair: Japan

Objectives and background

Paragraph 6a of CMM 2016/01 actions the SIOFA Scientific Committee to provide advice and recommendations to the Meeting of the Parties on the status of stocks of principal deep-sea fishery resources targeted, and, to the extent possible, taken as bycatch and caught incidentally in these deep-sea fisheries, including straddling fishery resources by 2019.

Stock Assessment in the SIOFA jurisdiction is currently challenged by the lack of an analysis and review process for available data held by Parties across the key fish stocks. The SC recommended that a working group be established under the SIOFA Scientific Committee to progress work related to stock assessments required to address this action.

Initially, the working group will focus on assessments for orange roughy and alfonsino in the SIOFA Agreement Area. The formation of the IWG will be useful in promoting engagement of specialist scientists in the stock assessment process, which is fundamental to success. Equally, it will enable the scientific committee to review assessments with the knowledge that all members and participants have had the opportunity to review data, contribute to the structure of the assessment models and identify research needs/priorities and management advice before the assessments are reviewed by the SC

Under these Terms of Reference, participants will commit to involvement in the process. All 'rules' of the SA-IWG will be consistent with the SC Terms of Reference, and so are not included here. The SA-IWG ToR will be focused on the practical aspects of progressing work related to stock assessments in SIOFA.

## Terms of Reference

- 1. The SA-IWG will be tasked with developing a research and review plan for implementation of stock assessments and related processes for progressing the objectives of the SIOFA SC and Meeting of the Parties. In the short-term, the SA-IWG will:
  - a. Assist with the timely provision of data to support the implementation of the SA-IWG for orange roughy and alfonsino.

In the medium to long-term, the SA-IWG will:

- b. Assist with review of methods and outputs used for stock assessments and provide advice to the SC on a harvest strategy and fisheries reference points for SIOFA fisheries.
- 2. To facilitate timely development of stock assessments, and in the absence of an established and populated SIOFA Fisheries Database, Parties agree to provide the necessary and available data to the working group within two months of a request, noting that appropriate data confidentiality protocols (as per CMM 2016/03 and domestic data and privacy policies) will apply.
- 3. The requesting party will need to confer with the data custodian to ensure the appropriate data confidentiality agreements and other relevant processes are followed.

## Interim dates and other issues for stock assessment

- Within the close of SIOFA SC2 and 1 month prior to SIOFA SC3, participants agree to:
  Alfonsino
  - Undertake analyses of any CPUE time series and length frequency data for the SIOFA alfonsino stocks. These analyses need to demonstrate that the CPUE and length frequency series satisfies the assumption that any trend is indexing the abundance of the stock and not changes in fisheries behaviour or data bias.
  - o Provide a summary of available biological information to SC3.
  - Prepare and submit a paper to SIOFA SC3 on the outcomes of the above alfonsino CPUE analyses)
  - Consider availability of other abundance indices, relative or absolute, that could provide input to alfonsino stock assessments and other methods to evaluate the status of alfonsino stocks.
  - Consult the FAO global alfonsino report and other relevant information to assist with stock assessments and other methods to evaluate the status of alfonsino stocks.

## Orange Roughy

- Provide a summary of orange roughy stock structure information and propose a delineation of management stocks. Identify a priority orange roughy stock for assessment and provide a summary of the data available for that stock.
- Agree on an assessment model and undertake a preliminary assessment to estimate current fishing mortality (and if feasible current biomass and biomass prior to fishing). If feasible (given the method) project biomass trends for the next 5 years given current fishing mortalities.
- Propose biomass and fishing mortality reference points for these stocks for consideration by SC3.
- Prepare and submit a paper to SIOFA SC3 on the outcomes of the above orange roughy stock assessments.

## **General stock assessments**

 Provide advice to the SIOFA secretariat on the design needs of SIOFA data bases for the purposes of stock assessment.