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Need for review of the Bottom Fishery Impact Assessment Standard in light of developments since 2010

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Contents

| | |
|--|----------|
| 1. Purpose of paper | 2 |
| 2. Introduction..... | 2 |
| 3. Changes in SPRFMO since the BFIAS was agreed..... | 2 |
| 4. Resolutions by the UNGA and other International Bodies | 2 |
| 5. Recent Observations from other RFMOs | 3 |
| 6. Recent Observations by authors..... | 4 |
| 7. Potential Next Steps | 4 |
| 8. Recommendations..... | 5 |

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1. Purpose of paper

This paper provides for the Scientific Committee's consideration an examination of the Bottom Fishing Impact Assessment Standard (BFIAS) in the SPRFMO Convention Area. It identifies criteria that may need clarification and proposes potential revisions.

2. Introduction

The 3rd Session of the Preparatory Conference adopted the [Bottom Fishery Impact Assessment Standard](#) in February 2012. The current BFIA Standard was based on an interim approach.

Australia and New Zealand suggest that there is merit in reviewing and revising, as necessary, the existing BFIAS to reflect new measures (see section 3), mechanisms (see SC5 paper updating progress on revised bottom fishing CMM) and terminology now used in SPRFMO. Ideally, any revisions made to the BFIAS could be made relatively timeless so that BFIAS doesn't need to be continually updated. However as a matter of good practice, the SC could seek to review the BFIAS every five years to identify any improvements to the BFIAS taking into account best practice or other information.

The BFIAS should reflect the FAO Deep Sea Guidelines (2008), tailored as necessary for SPRFMO

3. Changes in SPRFMO since the BFIAS was agreed

The BFIAS was adopted prior to the entry into force of the SPRFMO Convention and its CMMs. Since then, SPRFMO has developed a fully formed, well-functioning RFMO with a number of measures in place which aid in achieving the objectives of the Convention.

These new measures include:

- CMM 02 on Standards for the Collection, Reporting, Verification and Exchange of Data: established in 2013.
- CMM 08 for Gillnets in the SPRFMO Convention Area: established in 2013.
- CMM 03 for the Management of Bottom Fishing in the SPRFMO Convention Area: established in 2014.
- CMM 09 for Minimising Bycatch of Seabirds in the SPRFMO Convention Area: established in 2014.
- CMM 13 for the Management of New and Exploratory Fisheries in the SPRFMO Convention Area: established in 2016.

4. Resolutions by the UNGA and other International Bodies

Resolutions of the United Nations General Assembly have been influential in shaping bottom fishing policy and implementation in RFMOs, both with respect to management of deep-sea stocks and the prevention of significant adverse impacts on vulnerable marine ecosystems.

Beginning with Resolution 61/105 in 2006, the UN General Assembly called on States and RFMOs to take action with the respect to the management of bottom fisheries, emphasising the importance of, *inter alia*, conducting impact assessments, consistent with the FAO Deep Sea Guidelines, to determine whether bottom fishing activities would have significant adverse impacts on VMEs, and ensure effective management to prevent such impacts, or else prohibit the activity;

This is further reinforced through subsequent Resolutions, including Resolution 64/72 in 2009, Resolution 66/68 and Resolution 71/123 of 2016. The latter two resolutions strongly emphasise the importance of strengthening procedures for carrying out, reviewing and evaluating impact assessments, as well as taking into account individual collective and cumulative impacts.

5. Recent Observations from other RFMOs

The Scientific Committee of the Southern Indian Ocean Fisheries Agreement has recently reviewed BFIASs as part of its work to establish such a standard, including the existing SPRFMO BFIAS. Key points arising from that review of the SPRFMO BFIAS include:

- **A lack of clarity on the different requirements for a Bottom Fishing Impact Assessment that assesses past, agreed or future footprint:** elements of the text oscillate between past and future. A template for BFIA could remove this ambiguity. A template for updating a BFIA on the basis of changes to fishing – gear, location, species, catch totals and/or on new knowledge relating to VMEs would also aid adherence to the standard.
- **There is a lack of clarity between the intent of a Bottom Fishing Impact Assessment and its relationship to other mechanisms:** in its current form, the intent of the BFIAS is to assess risk to VMEs *and* deep sea fish stocks from bottom fishing. However, there is no explicit mechanism in the BFIAS for assigning risk to deep sea fish stocks, other than limited reference that bottom fishery impact assessments should contain information from stock assessments or other sources about the status of deep sea fish stocks.
- **There is a high level of duplication and other RFMO products:** There is a high level of overlap between components that the BFIAS requires and other mechanisms, including the annual national reports.
- **There are ongoing difficulties arising from subjectivity in the interpretation of the definitions of SAIs and VMEs:** Is the main intent of the Bottom Fishing Impact Assessments to provide assessment of the impact of different gears on predominantly benthic organisms? Interested stakeholders may need to state their understanding of these terms in the context of the intent of the BFIA and the relevant questions of scale. It would be advantageous if the BFIAS provided guidance on scale.
- **Cumulative impact:** little guidance given on how to assess cumulative impact and risk.
- **There is potential for a lack of equivalence in risk scores:** For example, a Medium risk is defined as being where the impact could have an influence on the environment, which will require active modification of the management approach and/or mitigation. Stocks subjected to targeted fishing could also be classified as medium risk. Are these risks equivalent? The BFIAS provides no guidance on this issue.
- **There are a number of pieces of information that are not collected on a routine basis that are identified in the BFIAS**
 - o detailed fishing plan
 - o Intended period and duration of fishing
 - o Estimated discard quantities by target and bycatch – likely not available for footprint assessment – needs some means to qualify / estimate and a commitment to record this in the future.

6. Recent Observations by authors

The current BFIAS includes the following ambiguities:

- Uncertainty around the meaning and intended interpretation of Significant Adverse Impacts and VME, especially with regard to issues of scale.
- There is little guidance on the unit of analysis for VME impact assessments (e.g., as a group, as communities or functional groups, as individual taxa, as meta-populations) (see paras 14 and 15 of FAO Guidelines).
- There is no working definition of ‘fishery’ in section 5 of the BFIAS (nor in the SPRFMO convention or FAO text), complicating analyses of the potential impacts of a fishery or fisheries.
- More clarity is probably required around the definition of bottom trawling; it should probably include trawling for benthic-pelagic species like alfonosinos using midwater trawls because such gear is likely to contact the seafloor during normal operations (see FAO Guidelines para 8)
- More guidance may be required for protocols for encounters with VMEs (see para 74 (ii) of the FAO Guidelines).
- There is little guidance on the information required on the status/assessment of non-target bycatch, especially low productivity, rare, endemic, or vulnerable species.
- There is little guidance on what review processes are required (see paras 75-80 of FAO guidelines) – including major reviews, regular ‘tweaks’ and encounter protocol reviews.

Potential Gaps in current BFIAS:

- Options for BFIAs (individual, combined/collective, updating previous/existing BFIAs) and process for managing (e.g. forwarding to SC or secretariat?)
- Bottom fishing impacts to reflect recent risk assessment work (e.g. Sharp et al 2017, Pitcher et al 2017).
- Exploratory fisheries– to reflect fishing outside footprint or in area not fished for more than 10 years
- Sections on VMEs and spatial management may need to be re-written to adopt the current processes being used by Australia and New Zealand using spatial decision-support software as “best practice”.
- VME taxa could be updated to include CCAMLR definitions as well.
- VME taxa used in predictive modelling should be broader than those that are retained by bottom fishing gear and currently used in encounter protocols.

7. Potential Next Steps

Form an intersessional working group to:

1. Provide a full critique of the current BFIAS and its currency given new developments in demersal fisheries management for consideration by the Scientific Committee in 2018.
2. Prepare a revised and updated BFIAS (if required) for agreement no later than the SC’s meeting in 2019.

8. Recommendations

It is recommended that the SPRFMO Scientific Committee:

- **notes** the BFIAS was agreed in 2011 and much has since changed in SPRFMO
- **notes** that UNGA has issued resolutions which reinforce the importance of conducting impact assessments which take full account of the FAO Deep Sea Guidelines and assess the individual, collective and cumulative impact; and further note that it would be appropriate for SPRFMO BFIAS to be revised to reflect these international developments to ensure current and future bottom fishing is assessed against a contemporary standard
- **agrees** that the BFIAS should be refreshed to reflect changes in SPRFMO and international instruments since it was published
- **recommends** to the Commission that the SC's Workplan should include preparation of a revised and updated BFIAS be developed for agreement no later than the SC's meeting in 2019