



SIOFA | APSOI

Southern Indian Ocean Fisheries Agreement  
*Accord relatif aux Pêches dans le Sud de l'Océan Indien*

**Convener's Report of the Southern Indian  
Ocean Fisheries Agreement (SIOFA)  
Scientific Committee (SC) Workshop to  
progress future protected area designation  
(WS2024-PAD)**

Virtual

13 & 20 November 2024

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- Annex B Proposed revisions to the SIOFA protocol for future protected area designation
- Annex C Summaries of each proposed BPA

## Agenda item 1 – Opening

### 1a. Welcome from Convener

1. The Workshop was convened by Mr Trent Timmiss (Australia).
2. The Convener opened the Workshop and welcomed the participants.

### 1b. Introduction of meeting participants

3. The list of registered participants is included in Annex A.

### 1c. Adoption of agenda

4. The revised preliminary agenda was adopted (WS2024-PAD-ADM-04).

### 1d. Confirmation of meeting documents

5. The Convener advised the Workshop that the meeting documents are available on the dedicated page on the SIOFA website (<https://siofa.org/meetings/WS2024-PAD>).

### 1e. Workshop report arrangements

6. The Convener introduced the meeting arrangements, including the timeline for circulating and finalising the Workshop Convener's Report.
7. Mr Alexander Meyer (Urban Connections, Tokyo) served as rapporteur and supported the Convener in preparing the Convener's report.

## Agenda item 2 – Background

### 2a. Basis for the current SIOFA interim protected areas

8. The Convener presented a summary (WS2024-PAD-03) of the history of SIOFA discussions and work related to benthic protected areas (BPAs), including the basis for the current SIOFA interim protected areas.

### 2b. SIOFA Bottom fishing footprint

9. The Convener presented the SIOFA bottom fishing footprint.

### 2c. International Obligations and Initiatives of potential relevance

10. The Workshop noted that the following international obligations and initiatives are of potential relevance: the United Nations (UN) Food and Agriculture Organization (FAO) Code of Conduct for Responsible Fisheries; the FAO International Guidelines for the Management of Deep-sea Fisheries in the High Seas; the FAO technical guidelines for marine protected areas and fisheries, the Agreement under the United Nations Convention on the Law of the Sea on the Conservation and Sustainable Use of Marine Biological Diversity of Areas Beyond National Jurisdiction (BBNJ) (which is not yet in force); UN General Assembly resolutions (e.g. 61/105, 64/72, 77/118); Ecologically or Biologically Significant Areas (EBSAs), including mechanisms for updating EBSAs with the most recently available information; Marine Mammal Protected Areas (IMMAs); and other effective area-based conservation measures (OECMs).

## Agenda item 3 – SIOFA Protocol for future protected areas designation

### 3a. Review Interim Protocol and criteria (SC3 report, Annex H)

11. The Workshop reviewed the Protocol for future protected areas designation and its criteria (SC3 report, Annex H).
12. The Workshop recommended that no changes are necessary to paragraph 1 of the protocol.
13. The Workshop recommended that the SC consider changing "VMEs are known to occur" to "VMEs are known or likely to occur" in paragraph 2 of the protocol.
14. The Workshop recommended that no changes, apart from minor editorial changes, are necessary to paragraphs 3 to 6 of the protocol.
15. The Workshop recommended that the SC consider adding references in paragraph 7 of the protocol and its subparagraphs to "endangered, threatened and protected (ETP) species", as defined in paragraph 206c of the SC8 report.

16. The Workshop encouraged CCPs to prepare papers, for SC10, for developing the interim definition of ETP species into a substantive list of species.
17. The Workshop recommended that the SC consider changing "life history stages" to "critical life history stages" in paragraph 7a of the protocol for greater clarity, while noting that the criterion in Annex I of the BBNJ does not include the word "critical".
18. The Workshop recommended that no changes are necessary to paragraph 8a of the protocol.
19. The Workshop recommended that the SC note that social, cultural and economic aspects of the marine environment are included in the definition of "best available information" in paragraph 8a of the protocol and that consideration of such information could be difficult in practice.
20. The Workshop recommended that the SC consider changing "indigenous" to "endemic" in paragraph 8b of the protocol for greater clarity.
21. The Workshop recommended that no changes are necessary to paragraphs 9 to 11 of the protocol.
22. The Workshop recommended that the SC consider adding a principle, under "Other principles to be considered in formulating recommendations for protected areas", for taking into account the adequacy and viability of a proposed protected area in achieving its objectives.
23. The Workshop recommended that the SC consider adding a principle, under "Other principles to be considered in formulating recommendations for protected areas", that allows for the possibility to take into account the beneficial effects on ecosystems and species of a potential protected area as a climate refugium.
24. The Workshop recommended that no changes are necessary to paragraph 12. Under "Guidance for SC Recommendations to the Meeting of the Parties", the Workshop recommended that the SC consider changing "management and research plan" to "management, research and monitoring plan".
25. The Workshop recommended a number of other minor editorial changes to the protocol.
26. The Workshop recommended that the SC adopt the proposed changes to the SIOFA protocol for future protected areas designation, as shown in Annex B, and to task the Secretariat to publish the protocol on the SIOFA website.

### **3b. Application of Bioregionalisation (Paper SC-09-27)**

27. The Convener recalled that the final report of SIOFA project PAE 2021-01 "Bioregionalisation and Management of Vulnerable Marine Ecosystems" (SC) was submitted to SC9 (SC-09-27), that there were no recommendations from the paper or the SC in relation to using the current bioregionalization for protected area designation, and that several bioregions have been suggested but are at a relatively broad scale.

### **3c. SIOFA PAE2022-MPA1 – Protocols to designate and evaluate MPAs, project report**

28. The Convener recalled that a preliminary report of SIOFA project PAE2022-MPA1 on protocols to designate and evaluate marine protected areas (MPAs) in the SIOFA Area was submitted to SC9; that the project consultants advised the continued use of SIOFA's BPA protocols, reinforced with the statistical methodologies Species Archetype Model (SAM) and Spatial Generalised Linear Models (SGLM), for quantitative delimitation of boundaries of new BPAs and continued monitoring of currently existing BPAs; and that the project final report is now published on the SIOFA website (<https://siofa.org/science/sc-works/PAE2022-MPA1>) and will be submitted to SC10.

### **3d. Other potential protected approaches in the SIOFA Area**

#### **I. Marine OECMs (Information Paper MoP-11-INFO-21)**

#### **II. Ecological or Biologically Significant Areas (EBSAs)**

#### **III. Important Marine Mammal Protected Areas (IMMAs)**

29. The Deep Sea Conservation Coalition (DSCC) gave a presentation on progressing benthic protection in SIOFA (WS2024-PAD-04), calling in particular for the inclusion of additional criteria for evaluating protected area proposals into the protocol to align with international practice,

and incorporation of additional BBNJ Annex I Indicative Criteria for Identification of Areas.

30. The DSCC reminded the Workshop that at MoP11, it had presented a technical note prepared by the International Union for Conservation of Nature (IUCN) on key characteristics and criteria for OECMs (MoP-11-INFO-21) and that it had noted the potential value of OECMs and the need to ensure the consistent application of their criteria to ensure that they deliver effective conservation outcomes. The DSCC suggested that the technical note could be helpful in SIOFA's discussion on the potential use of OECMs.
31. The Workshop recommended that the SC note the potential usefulness of the IUCN technical note on key characteristics and criteria for OECMs, as well as the IUCN report on recognising and reporting OECMs, as resources to inform the SC's discussions on the potential use of OECMs in SIOFA.

### **3e. Advice to SC10 on the existing SIOFA protected area designation protocol**

32. The Workshop's recommendations to SC10 on the existing SIOFA protected area designation protocol are highlighted in grey above and proposed revisions to the protocol corresponding to the Workshop's advice are included in Annex B.

## **Agenda item 4 – Evaluation of SIOFA Benthic Protected Areas (BPAs)**

### **4a. Interim SIOFA BPAs (CMM 01(2024) Annex 3)**

#### **4b. Current voluntary BPAs (Proposal MoP-11-29 rev2)**

33. The Cook Islands presented WS2024-PAD-02, a paper jointly prepared with Australia, Japan, and the Southern Indian Ocean Deepsea Fishers Association (SIODFA). The paper evaluated the five existing interim SIOFA BPAs (Atlantis Bank, Coral, Fools Flat, Middle of What, and Walter's Shoal) and seven voluntary BPAs (Banana, Bridle, East Broken Ridge, Glden Draak, Rusky, Mid-Indian Ridge, and South Indian Ridge) within SIOFA against the SIOFA standard protocol for future protected areas designation (SC3 Report, Annex H) and proposed the permanent closure of these voluntary BPAs, to all bottom fishing in some cases and to all bottom fishing except bottom longlining in other cases.
34. The Cook Islands explained that collectively these areas make up only 0.82% of the SIOFA Area, with the existing interim SIOFA BPAs specified in CMM 01(2024) (Interim Management of Bottom Fishing) covering 0.09% of the Area and the voluntary closed areas covering 0.73% of the Area. These areas represent marine habitats that are geographically unique and contain habitats that contain VME indicator taxa or are areas that are critical feeding areas for seabirds, all of which require protection. Although they have only either interim or voluntary protection, they have been closed in reality for at least 17 years. Furthermore, as deep-sea species tend to be fragile, slow-growing and long-lived, offering them small areas for long-term protection where they can exist undisturbed will provide the most effective conservation benefits. The designation of these areas as BPAs will formalise existing practices and provide surety for the conservation efforts of SIOFA as well as certainty for the fishing industry on their status.
35. Summaries of each of the proposed BPAs, prepared by the proponents, are attached to the report as Annex C.

### **4c. Advice to the SC10 and MoP12 on their application as effective spatial management tools and for providing clarity for BPA adoption within the SIOFA benthic management framework (MoP11 Report, Para 161)**

36. The Workshop recommended that the SC note that all 12 features considered (namely the Atlantis Bank, Banana, Bridle, Coral, East Broken Ridge, Fools Flat, Glden Draak, Mid-Indian Ridge, Middle of What, Rusky Knoll, South Indian Ridge and Walter's Shoal features) satisfy various criteria in the SIOFA standard protocol for future protected areas designation. Full details of each BPA are contained in Annex C.
37. The Workshop recommended that the SC recall Article 4(c) of the Agreement which obliges Contracting Parties to apply the precautionary approach in accordance with the FAO Code of

Conduct for Responsible Fisheries and the 1995 UN Fish Stocks Agreement, whereby the absence of adequate scientific information shall not be used as a reason for postponing or failing to take conservation and management measures.

38. Regarding Atlantis Bank, the Workshop recommended that the SC:
  - a. note the presence of unique habitats, VME indicator taxa, and endemic species in the area;
  - b. note that the area satisfies criteria 5b, 6a and 7b of the SIOFA standard protocol for future protected areas designation;
  - c. note that the area is currently listed as an EBSA; and
  - d. recommend that the MoP designate as a BPA and close to bottom fishing due to the presence of unique habitats, VME indicator taxa, and endemic species.
39. Regarding Coral, the Workshop recommended that the SC:
  - a. note the presence of unique habitats, VME indicator taxa, and endemic species in the area;
  - b. note that the area satisfies criteria 2a, 3b, 5b, and 6 of the SIOFA standard protocol for future protected areas designation; and
  - c. recommend that the MoP designate as a BPA and close to bottom fishing, except bottom longlining, due to the presence of unique habitats, VME indicator taxa, and endemic species.
40. Regarding Fools Flat, the Workshop recommended that the SC:
  - a. note the presence of VME indicator taxa and potential unique habitats in the area;
  - b. note the long period of closure to fishing despite historic commercial fishing on the feature;
  - c. note that the area satisfies criteria 3b, 4a&b, 5b of the SIOFA standard protocol for future protected areas designation;
  - d. note that the area contains framework-building coral reefs with brain and black coral;
  - e. note that the area is currently listed as an EBSA; and
  - f. recommend that the MoP designate as a BPA and close to bottom fishing due to the presence of VME indicator taxa and potential unique habitats.
41. Regarding Middle of What, the Workshop recommended that the SC:
  - a. note the presence of unique habitats, VME indicator taxa, and endemic species in the area;
  - b. note the long period of closure to fishing following high levels of fishing effort in the past;
  - c. note that the area satisfies criteria 2a and 3a&b of the SIOFA standard protocol for future protected areas designation;
  - d. note that the area is the only known example of a seamount with cold-water coral reef habitat lying in the boundary region of sub-Antarctic and sub-tropical water masses; and
  - e. recommend that the MoP designate as a BPA and close to bottom fishing due to the presence of unique habitats, VME indicator taxa, endemic species and long history of closure following high historic fishing effort.
42. Regarding Walter's Shoal, the Workshop recommended that the SC:
  - a. note that Walter's Shoal is considered to be a VME;
  - b. note the long history of closure and the proximity to major fishing grounds;
  - c. note that the area satisfies criteria 2a, 3b, 5b, 6, and 7b of the SIOFA standard protocol for future protected areas designation; and
  - d. recommend that the MoP designate as a BPA and close to bottom fishing, except longlining, due to the presence of unique habitats, the area's recognition as a VME and endemic species.
43. Regarding Banana, the Workshop recommended that the SC:
  - a. note that Banana is thought to be a VME;
  - b. note that the area satisfies criteria 2a, 4a&b, and 7b of the SIOFA standard protocol for future protected areas designation; and
  - c. recommends that the MoP designate as a BPA and close to bottom fishing due to the presence of unique habitats, VME indicator taxa, and endemic species.
44. Regarding Bridle, the Workshop recommended that the SC:
  - a. note the presence of VME indicator taxa and endemic species in the area;



- b. note that the area satisfies criteria 3a and 7b of the SIOFA standard protocol for future protected areas designation; and
  - c. recommend that the MoP designate as a BPA and close to bottom fishing due to the presence of VME indicator taxa and endemic species.
45. Regarding East Broken Ridge, the Workshop recommended that the SC:
- a. note the presence of VME indicator taxa in the area;
  - b. note that the area is currently listed as an EBSA;
  - c. note that the area satisfies criteria 4a&b of the SIOFA standard protocol for future protected areas designation;
  - d. note that fishing within this area with all gears could detrimentally impact the feature; and
  - e. recommend that the MoP designate as a BPA and close to bottom fishing due to the presence of VME indicator taxa.
46. Regarding Gülden Draak, the Workshop recommended that the SC:
- a. note the likely presence of VME indicator taxa and potential unique habitats in the area;
  - b. note that the remote nature of this area as well as the long history of closure suggest retaining this closure would be beneficial;
  - c. note that the area satisfies criteria 3c and 4a&b of the SIOFA standard protocol for future protected areas designation; and
  - d. recommend that the MoP designate as a BPA and close to bottom fishing due to the potential presence of VME indicator taxa, potential unique habitats, and sensitive geology.
47. Regarding Mid-Indian Ridge, the Workshop recommended that the SC:
- a. note the likely presence of VME indicator taxa and potentially sensitive geological features in the area;
  - b. note that the remote nature of this area and that this area is unlikely to have ever been fished suggest retaining this closure would be beneficial;
  - c. note that the area satisfies criteria 2a, 3c and 4a&b of the SIOFA standard protocol for future protected areas designation; and
  - d. recommend that the MoP designate as a BPA and close to bottom fishing due to the sensitive geology of the area, the likely presence of VME indicator taxa, and the remote and pristine nature of this area.
48. Regarding Rusky Knoll, the Workshop recommended that the SC:
- a. note the presence of VME indicator taxa and potentially unique habitats in the area;
  - b. note that the area is currently listed as an EBSA;
  - c. note the long period of closure to fishing following high levels of fishing effort in the past;
  - d. note that the area satisfies criteria 2a, 3b and 7b of the SIOFA standard protocol for future protected areas designation; and
  - e. recommend that the MoP designate as a BPA and close to bottom fishing due to the presence of VME indicator taxa, potentially unique habitats, and long period of closure following historic fishing effort.
49. Regarding South Indian Ridge, the Workshop recommended that the SC:
- a. note that this area is not the same as the South Indian Ridge toothfish management area proposed by SC9 and consider a new name for the area;
  - b. note the presence of potential VME indicator taxa, potential unique habitats, and potential sensitive geological features in the area;
  - c. note that the area is currently listed as an EBSA;
  - d. note that the area is a highly significant habitat for seabirds;
  - e. note that the area satisfies criteria 2a, 3b, 4a, 5b, 7b of the SIOFA standard protocol for future protected areas designation; and
  - f. recommend that the MoP designates as a BPA and close to bottom fishing, except longlining, due to the presence of potential VME indicator taxa, potential unique habitats, and potential sensitive geological features.



- 50. The Workshop recommended that these BPAs, if designated, should be collectively or individually reviewed within 10 years or as new information comes to light.
- 51. The Workshop noted that CCPs may want to consider the voluntary closure of areas not listed in CMM 01(2024) while they are under consideration for designation as BPAs by the SC and the MoP.
- 52. The Workshop encouraged CCPs to provide papers to SC10 on potential broader approaches to protected area designation in the SIOFA Area.

## **Agenda item 5 – Workplan to progress identification and designation of future BPAs**

### **5a. Draft workplan and indicative budget**

53. The Workshop recommended that the SC further develops a project as in the following table and adds it to its workplan.

Project code	Lead	Title	Budget	Funding source	Project status	Priority
BPA-2026-01	COK / JPN / AUS	Develop draft management, research and monitoring plan for BPAs	in kind	-	Planned	TBD

## **Agenda item 6 – Summary of advice to SC10**

- 54. Paragraphs with recommendations and advice to the MoP are highlighted in grey above.
- 55. The Convener thanked the participants for their active contributions.
- 56. The meeting was closed at 10:00 a.m., UTC, 20 November 2024.
- 57. [The report was circulated via email following the close of the workshop and the Convener invited participants to provide any comments by the end of 11 December 2024.]

## Annex A – List of registered participants

Delegation	Title	First name	Last name	Position	Organisation
Australia	Mr	Trent	Timmiss	HoD	ABARES
Australia	Mr	Adam	Camilleri	Adviser	DAFF
Australia	Ms	Stacey	Antunovich	Adviser	DAFF
Australia	Dr	Heather	Patterson	Alternate	ABARES
Australia	Dr	Lyn	Goldsworthy	Advisor	UTAS
Australia	Mr	Patrick	Sachs	Alternate	DAFF
Australia	Ms	Danait	Ghebrezgabhier	Advisor	AFMA
China	Dr	Heng	Zhang	HoD	East China Sea Fisheries Research Institute, China Academy of Fisheries Science
China	Dr	Jun	Yu	Advisor	Shanghai Ocean University
China	Dr	Zhou	Fang	Alternate	Shanghai Ocean University
Cook Islands	Dr	Stephen	Brouwer	HoD	Ministry of Marine Resources
Cook Islands	Dr	Matthew	Farthing	Advisor	Sparid FRCS
EU	Dr	Sebastián	Rodriguez Alfaro	HoD	Marine Sciences/EU
FR-OT	Dr	Alexis	Martin	Head of Delegation (HoD)	Muséum national d'Histoire naturelle
FR-OT	Ms	Charlotte	Chazeau	Alternate	MNHN
FR-OT	Mr	Nicolas	Gasco	Expert	MNHN
FR-OT	Ms	Marion	Kauffmann	Expert	MNHN
Japan	Dr	Takehiro	Okuda	HoD	Fisheries Resources Institute, Japan Fisheries Research and Education Agency
Japan	Dr	Midori	Hashimoto	SC Alternate	Japan Fisheries Research and Education Agency
Japan	Mr	Taisuke	Iwano	MoP Head of Delegation	Fisheries Agency Government of Japan
Japan	Mr	Kazuki	Tsuda	Alternate	Fisheries Agency Government of Japan
Japan	Mr	Ichiro	Nomura	Chairperson of Meeting of the Parties	Fisheries Agency Government of Japan
Japan	Mr	Hideki	Moronuki	Advisor	Japan overseas fishing association
Mauritius	Mr	Doorvanand	Kawol	Senior Technical Officer	Ministry of Blue Economy, Marine Resources, Fisheries and Shipping
Seychelles	Mr	Rodney	Govinden	HoD	Seychelles Fishing Authority
Seychelles	Ms	Sabrena	Lawrence	Alternate	Seychelles Fishing Authority
Seychelles	Ms	Angelique	Pouponneau	Expert	
Seychelles	Ms	Sheena	Talma	Expert	
Thailand	Mr	Weerapol	Thitipongtrakul	HoD	Department of Fisheries, Thailand
Thailand	Mr	Bunyarit	Permnak	Alternate	Department of Fisheries, Thailand
Observers SIODFA	Dr	Ross	Shotton	Participant	SIODFA (Exec Sec)
Observers SIODFA	Mr	Charles	Heaphy	Participant	SIODFA (President, UFI, Rarotonga)
Observers SIODFA	Mr	Naohisa	Miygawa	Participant	SIODFA (Taiyo Fisheries, Tokyo)
Observers SIODFA	Mr	Rhys	Arangio	Participant	SIODFA (Austral Fisheries, Perth)
Observers SIODFA	Mr	Silverstone	Tim	Participant	SIODFA (Tim Silverstone, Sealord Group)
Observers DSCC	Mr	Barry	Weeber	HoD	Deep Sea Conservation Coalition
Observers DSCC	Mr	Duncan	Currie	Alternate	Deep Sea Conservation Coalition
Observers FAO	Dr	Anthony	Thompson	Observer	FAO, Rome (DSF Project)
Workshop Convener	Mr	Trent	Timmiss	AUS SC HoD	ABARES
SIOFA SC Chair	Mr	Alistair	Dunn	Director	Ocean Environmental
SIOFA SC Vice Chair	Dr	Pavarot	Noranarttragoon	Senior expert	Marine Fisheries Research and Development Division

Convener's Report of the SIOFA SC Workshop to progress future protected area designation (WS2024-PAD)

Delegation	Title	First name	Last name	Position	Organisation
					Department of Fisheries, Thailand
SIOFA SC Vice Chair	Dr	Zhou	Fang	Alternate	Shanghai Ocean University
Rapporteur	Mr	Alex	Meyer	Rapporteur	Urban Connections
SIOFA Secretariat	Mr	Thierry	Clot	Executive Secretary	SIOFA Secretariat
SIOFA Secretariat	Mr	Pierre	Peries	Data Officer	SIOFA Secretariat
SIOFA Secretariat	Mr	Johnny	Louys	Compliance Officer	SIOFA Secretariat
SIOFA Secretariat	Dr	Marco	Milardi	Science Officer	SIOFA Secretariat

## **Annex B – Proposed revisions to the SIOFA protocol for future protected area designation**

### SIOFA Standard protocol for future protected areas designation

#### PROCESS FOR PROPOSAL AND REVIEW

As described in the terms of reference for the Protected Areas and Ecosystems working group (PAEWG, SC3 Report Annex I)

#### CRITERIA FOR EVALUATING PROTECTED AREA PROPOSALS

1. The objective/s for the protected area is clearly stated and the proposal clearly demonstrates which of the criteria are met.

The proposal should then state which of the following criteria meet the objectives with “the list below having no particular ranking of importance”.

2. VMEs are known or likely to occur and/or triggering of VME indicator thresholds reported for the area proposed

a. Closure may be warranted if there are known or consistent triggering of VME indicator thresholds of CPs, indicating potential VME.

3. Bioregional representation

a. Area is known to contain unique, rare or distinct, habitats or ecosystems that fishing operations will disturb.

b. Area with a comparatively higher degree of naturalness due to zero or a low level of human-induced disturbance or degradation from, for example, historical fishing activity.

4. Geographic and/or geomorphological representation

a. The area provides for important or desirable geographic representation within the SIOFA Area

b. The area proposed is known to contain unique or unusual geomorphological features that fishing operations may damage.

5. Biodiversity representation

a. The area is known to contain unique or rare (occurring in only a few locations) species, populations or communities.

b. The area is known to contain a high diversity of ecosystems, habitats, communities, or species, or has higher genetic diversity.

c. The area is known to contain a relatively high proportion of sensitive habitats, biotopes or species that are functionally fragile (highly susceptible to degradation or depletion by human activity or by natural events) or with slow recovery.

6. Scientific interest

a. The area has scientific research interest associated with understanding ecosystem, biological, geological and biodiversity processes in the SIOFA Area.

7. Areas of special significance for endangered, threatened and protected (ETP) species or important species or ecosystem properties

- a. There is evidence that the area is of special importance for critical life history stages of ETP species.
- b. There is evidence that the area contains habitat for the survival and recovery ETP or declining species or is an area with significant assemblages of such species.

Other principles to be considered in formulating recommendations for protected areas

8. Best available information should be used to support protected area proposals and designation. This information should be sufficiently substantiated and/or verified (and preferably provided), for example through the referencing of available literature/research. Mechanisms such as statements and observation made by skippers and crew could be used as supporting information to scientific validated data. In the absence of information, a precautionary approach should be applied.

- a. Recommendations must be informed by the available information. Best available information should include ecological, environmental, social, cultural and economic aspects of the marine environment that is available without unreasonable cost, effort or loss of timeliness.
- b. Recommendations to implement spatial management measures should not be postponed because of a lack of full scientific certainty, especially where significant or irreversible damage to ecosystems could occur or endemic species are at risk of extinction.

9. Adverse impacts on existing users should be evaluated.

- a. Where there is a choice of several sites, which if protected would add a similar ecosystem or habitat to the closure network, and only one, or some of the sites are to be closed, the site(s) recommended should minimise adverse impacts on existing users. Where there is a choice to be made among minimum impact sites, selection may also be guided by:
  - i. ease of management and enforcement; and
  - ii. if there are other benefits such as education or eco-tourism.

10. The rationale used to recommend spatial management measures should be consistent and transparent.

10 bis Evaluation of the proposal should take account of the adequacy and viability of the proposed protected area in achieving its objectives.

11. There should be an evaluation of existing closures when making recommendations and explanation as to how a new management measure will assist in achieving MoP objectives.

a. An enumeration of spatial management measures should be prepared to assess progress towards achieving the policies.

11 bis Evaluation of the proposal may take into account the beneficial effects on ecosystems and species of a potential protected area as a climate refugium.

Considerations for determining boundaries of protected areas

12. Dimensions of the area

- a. The recommended area should, as far as practicable, include continuous and contiguous depth.

- b. Area designation should be based on seafloor features such as geomorphic features
- c. Size and shape should be orientated to account for inclusion of connectivity corridors and biological dispersal patterns within and across closures.
  - i. Where this is unavailable, protected area proposal and designation may consider linkages with adjacent protected areas, or research from other oceans to inform inferences on biological dispersal patterns.
  - d. Boundary lines should be simple, as much as possible following straight latitudinal/longitudinal lines and, where possible, coinciding with existing regulatory boundaries.
- e. The size and shape of each area should be set to minimise socio-economic costs.

#### GUIDANCE FOR SC RECOMMENDATIONS TO THE MEETING OF THE PARTIES

The SC should make a recommendation to the MoP based on how the proposal satisfies one or more of the criteria of the protocol.

If the scientific evidence to support protecting area using the protocol is uncertain or insufficient, more data may be required.

If the proposal documents the necessary data and scientific information to support a protected area using protocol, different measures could be applied, such as management measures, technical measures, closures.

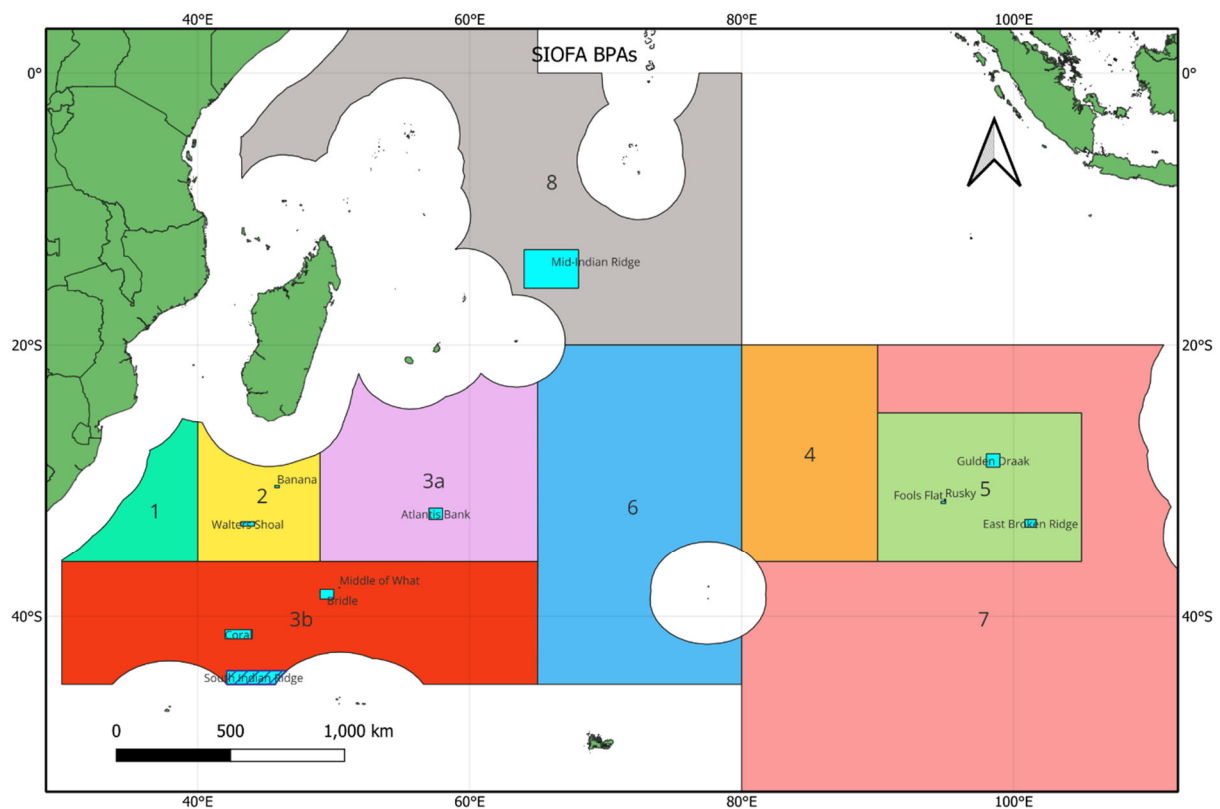
In case of an area becoming protected, a management, research and monitoring plan shall be associated to it on the year to come. It will include:

- The measures in place in the protected area;
- The time of review of the protected area;
- If needed, the research that should be undertaken in the area. To this end, the parties should consider asking for international funds.

## Annex C – Summaries of each proposed BPA

Note: For the purposes of this document “Bottom fishing” is defined as per CMM 01 (2023) paragraph 3b.

The *SIOFA Standard protocol for future protected areas designation* criteria were used for evaluating the BPA proposals.



**Figure 1:** Locations of the areas considered for Benthic Protected Areas (BPAs) designation within this document.



**SIOFA Standard protocol for future protected areas designation (SC3 report Annex H)**

1. The objective/s for the protected area is clearly stated and the proposal clearly demonstrates which of the criteria are met.  
The proposal should then state which of the following criteria meet the objectives with "the list below having no particular ranking of importance".
2. **VMEs are known to occur and/or triggering of VME indicator thresholds reported for the area proposed**
  - a. Closure may be warranted if there are known or consistent triggering of VME indicator thresholds of CPs, indicating potential VME.
3. **Bioregional representation**
  - a. Area is known to contain unique, rare or distinct, habitats or ecosystems that fishing operations will disturb.
  - b. Area with a comparatively higher degree of naturalness due to zero or a low level of human-induced disturbance or degradation from, for example, historical fishing activity.
4. **Geographic and/or geomorphological representation**
  - a. The area provides for important or desirable geographic representation within the SIOFA area
  - b. The area proposed is known to contain unique or unusual geomorphological features that fishing operations may damage.
5. **Biodiversity representation**
  - a. The area is known to contain unique or rare (occurring in only a few locations) species, populations or communities.
  - b. The area is known to contain a high diversity of ecosystems, habitats, communities, or species, or has higher genetic diversity.
  - c. The area is known to contain a relatively high proportion of sensitive habitats, biotopes or species that are functionally fragile (highly susceptible to degradation or depletion by human activity or by natural events) or with slow recovery.
6. **Scientific interest**
  - a. The area has scientific research interest associated with understanding ecosystem, biological, geological and biodiversity processes in the SIOFA region.
7. **Areas of special significance for threatened or important species or ecosystem properties**
  - a. There is evidence that the area is of special importance for life history stages of species and/or threatened species.
  - b. There is evidence that the area contains habitat for the survival and recovery of endangered, threatened, declining species or is an area with significant assemblages of such species.

<b>Name</b>	<b>Atlantis Bank</b>
<b>Proponents</b>	Australia, Cook Island, Japan and SIODFA
<b>Geographic description</b>	An ancient fossil island with complex sea-cliff deep-sea communities. <b>Coordinates:</b> 32°00'S - 57°00'E : 32°50'S - 58°00'E
<b>Objectives</b>	<ul style="list-style-type: none"> <li>• Protection of potential VMEs;</li> <li>• Protection of biodiversity; and</li> <li>• Protection of an area of special scientific interest.</li> </ul>
<b>Criteria that the protected area meets</b>	<p><b><u>This proposed area meets the following SC3 criteria:</u></b></p> <ul style="list-style-type: none"> <li>• 5b. Biodiversity representation.</li> <li>• 6a. Scientific interest.</li> <li>• 7b. Areas of special significance for threatened or important species or ecosystem properties.</li> </ul> <p><b><u>Feature description</u></b></p> <ul style="list-style-type: none"> <li>• Seamount in sub-tropical waters it rises from 4000 m to a depth of 700 m.</li> <li>• It is an ancient fossil island with 11-million- year-old fossil features including sea-stacks.</li> </ul> <p><b><u>Biodiversity representation</u></b></p> <ul style="list-style-type: none"> <li>• Supports a very diverse deep-sea fauna including coral gardens and complex unique sea-cliff deep-sea communities including cactus urchins, glass sponges and octocorals with populations of lobsters, crabs, sharks, sea fans, siphonophores.</li> <li>• Contains new species and endemic species including large <i>Paragorgia</i> colonies.</li> <li>• Suprabenthic species include crow shark, alfonsino, Gilchrist's orange roughy, the big-eye dory smooth lanternshark and false catsharks.</li> <li>• The seamount focuses trophic resources linking nutrients between benthic and pelagic communities leading to higher biological productivity than in the surrounding pelagic waters.</li> </ul> <p><b><u>Scientific interest</u></b></p> <ul style="list-style-type: none"> <li>• The first tectonic guyot with ultraslow-spreading ridges ever studied.</li> <li>• International Ocean Discovery Program's 'Expedition 360' investigated its unique paleontological record.</li> <li>• Studied as part of the IUCN Seamounts Project.</li> <li>• Tectonic studies have been conducted there since the 1950s, including Ocean Drilling Programme; expeditions from Woods Hole Oceanographic Institute and Cambridge University.</li> </ul> <p><b><u>Areas of special significance for threatened or important species or ecosystem properties</u></b></p> <ul style="list-style-type: none"> <li>• Deepwater sharks observed.</li> </ul>

	<p><b><u>Fishing history</u></b></p> <ul style="list-style-type: none"> <li>• There have been about 60 bottom trawl tows and Soviet-era fishing but most of the sea floor is reportedly untouched by bottom trawling.</li> <li>• Alfonsino catches of 1000 t were made in the past as well as small catches of orange roughy.</li> <li>• SIODFA has closed this location to fishing by vessels that are members of its association.</li> </ul> <p><b><u>Other supporting information</u></b></p> <ul style="list-style-type: none"> <li>• Listed as an Ecologically and Biologically Significant Area (EBSA)</li> <li>• Identified by UNESCO as a priority site of Outstanding Universal Value (OUV)</li> <li>• It satisfies the following World Heritage Criteria: <ul style="list-style-type: none"> <li>○ VIII (major stages in earth’s history and geological processes),</li> <li>○ IX (significant ecological and biological processes in the evolution of ecosystems, communities of plant and animals), and</li> <li>○ X (significant biological diversity and threatened species of OUV).</li> </ul> </li> </ul>
<p><b>Social, cultural and economic interests</b></p>	<ul style="list-style-type: none"> <li>• The area is the location of a historic fishery. It is possible that designation could have adverse economic impacts in terms of forgone opportunity.</li> <li>• However, given, the very small area relative to the entire SIOFA fishing areas available, and the long history of voluntary closure this lost opportunity is considered to be small.</li> </ul>
<p><b>Risks to the proposed area</b></p>	<ul style="list-style-type: none"> <li>• Fishing within this area with all gears could detrimentally impact the biodiversity, damage VMEs and scientific interest of this area.</li> </ul>
<p><b>Review periods</b></p>	<p>It is recommended that this designation be reviewed every 10 years to collate any new information evaluating the justification for its BPA designation.</p>
<p><b>Outline of monitoring and/or research needed</b></p>	<ul style="list-style-type: none"> <li>• A desk-top compilation of publications from research undertaken within this area would assist with future reviews of the designation.</li> <li>• Non-extractive research activities such as ROV monitoring of the area would be useful.</li> <li>• High-resolution bathymetric mapping and habitat delineation would be informative.</li> </ul>

### Recommendation summary

Atlantis bank			
Risk	Objectives	Recommendation	Review
<b>Fishing within this area with all gears could detrimentally impact the biodiversity, damage VMEs and scientific interest of this area.</b>	<ul style="list-style-type: none"> <li>• Protection of potential VMEs;</li> <li>• Protection of biodiversity; and</li> <li>• Protection of an area of special scientific interest.</li> </ul>	Designate as a BPA and close to bottom fishing due to the presence of unique habitats, VME indicator taxa, deepwater elasmobranchs and endemic species.	10 years

<b>Name</b>	<b>Banana</b>
<b>Proponents</b>	Australia, Cook Island, Japan and SIODFA
<b>Geographic description</b>	Rocky and isolated area elevation exhibiting hard corals. Thought to be a VME. <b>Coordinates:</b> 30°20' S - 45°40' E : 30°30' S - 46°00'E
<b>Objectives</b>	<ul style="list-style-type: none"> <li>• Protection of its geographic and/or unique representation;</li> <li>• Protection of potential VMEs;</li> <li>• Protection of deepwater elasmobranchs</li> </ul>
<b>Criteria that the protected area meets</b>	<p><b><u>This proposed area meets the following SC3 criteria:</u></b></p> <ul style="list-style-type: none"> <li>• 2a. VMEs are known to occur and/or triggering of VME indicator thresholds reported for the area proposed</li> <li>• 4a&amp;b. Geographic and geomorphological representation.</li> <li>• 7b. Areas of special significance for threatened or important species or ecosystem properties.</li> </ul> <p><b><u>Feature description</u></b></p> <ul style="list-style-type: none"> <li>• Very rocky and isolated elevation north of Walters' Bank, harbouring hard corals.</li> </ul> <p><b><u>Biodiversity representation</u></b></p> <ul style="list-style-type: none"> <li>• Supports important benthic faunal populations and communities, including black and other corals.</li> <li>• Thought to be a VME where fishing would have a serious adverse impact.</li> </ul> <p><b><u>Areas of special significance for threatened or important species or ecosystem properties</u></b></p> <ul style="list-style-type: none"> <li>• Likely to support fragile deepwater elasmobranchs</li> </ul> <p><b><u>Fishing history</u></b></p> <ul style="list-style-type: none"> <li>• Thirteen trawl shots were attempted in the past with most snagging on the bottom.</li> <li>• 4.3 tonnes of orange roughy have been caught in the area.</li> <li>• However, the areas has been voluntarily closed by SIODFA members.</li> </ul>
<b>Social, cultural and economic interests</b>	<ul style="list-style-type: none"> <li>• It is possible that designation could have adverse economic impacts in terms of forgone opportunity.</li> <li>• However, given the complications experienced during past fishing attempts, the very small area relative to the entire SIOFA fishing areas available, and the long history of voluntary closure this lost opportunity is considered to be small.</li> </ul>
<b>Risks to the proposed area</b>	<ul style="list-style-type: none"> <li>• Fishing within this area with all gears could detrimentally impact the biodiversity and VMEs.</li> </ul>
<b>Review periods</b>	It is recommended that this designation be reviewed every 10 years to collate any new information evaluating the justification for its BPA designation.
<b>Outline of monitoring</b>	<ul style="list-style-type: none"> <li>• A desk-top compilation of publications from research undertaken within this area would assist with future reviews of the designation.</li> </ul>

<b>and/or research needed</b>	<ul style="list-style-type: none"> <li>• Non-extractive research activities such as ROV monitoring of the area would be useful.</li> <li>• High-resolution bathymetric mapping and habitat delineation would be informative.</li> </ul>
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### Recommendation summary

Banana			
Risk	Objectives	Recommendation	Review
<b>Fishing within this area with all gears could detrimentally impact the biodiversity and VMEs.</b>	<ul style="list-style-type: none"> <li>• The protection of its geographic and/or unique representation;</li> <li>• The protection of potential VMEs;</li> <li>• Protection of deepwater elasmobranchs.</li> </ul>	Designate as a BPA and close to bottom fishing due to the presence of unique habitats, VME indicator taxa, deepwater elasmobranchs and endemic species.	10 years

<b>Name</b>	<b>Bridle</b>
<b>Proponents</b>	Australia, Cook Island, Japan and SIODFA
<b>Geographic description</b>	An area of knolls and ridges, unmapped and undescribed. <b>Coordinates:</b> 38°03' S - 49°00' E : 38°45' S - 50°00' E
<b>Objectives</b>	<ul style="list-style-type: none"> <li>• Protection of its geographic and/or unique representation;</li> <li>• Protection of potential VMEs; and</li> <li>• Protection of deepwater elasmobranchs.</li> </ul>
<b>Criteria that the protected area meets</b>	<p><b><u>This proposed area meets the following SC3 criteria:</u></b></p> <ul style="list-style-type: none"> <li>• 3a. Geographic and/or geomorphological representation.</li> <li>• 7b. Areas of special significance for threatened or important species or ecosystem properties.</li> </ul> <p><b><u>Feature description</u></b></p> <ul style="list-style-type: none"> <li>• Seafloor region located in mid-region of South Indian Ridge.</li> <li>• Characterised by many small ridges.</li> <li>• Heavy sedimentation generating a highly productive water column and potentially benthos.</li> </ul> <p><b><u>Biodiversity representation</u></b></p> <ul style="list-style-type: none"> <li>• There is an abundance of brain corals in almost pristine condition.</li> <li>• Reportedly important benthic faunal populations and communities but further exploration is required to qualify this.</li> </ul> <p><b><u>Fishing history</u></b></p> <ul style="list-style-type: none"> <li>• Reportedly five historically significant spawning stocks of orange roughy within 50 miles of this area.</li> <li>• Heavily fished in the past particularly in 2000. Commercial estimates of past catches from 5,000 to 10,000 tonnes, resulting in considerably reduced stock biomass.</li> <li>• Known to break trawl bridles (hence the name.)</li> <li>• Limited trawling effort in recent years with only small catches of orange roughy and oreo dories.</li> </ul> <p><b><u>Other supporting information (if available)</u></b></p> <ul style="list-style-type: none"> <li>• No trawling by SIODFA vessels is permitted.</li> </ul>
<b>Social, cultural and economic interests</b>	<ul style="list-style-type: none"> <li>• It is possible that designation could have adverse social, cultural or economic impacts in terms of forgone opportunity for fishing.</li> <li>• However, given the very small area relative to the entire SIOFA fishing areas available and the long history of voluntary closure this lost opportunity is conceded small.</li> </ul>
<b>Risks to the proposed area</b>	<ul style="list-style-type: none"> <li>• Fishing within this area with all gears could detrimentally impact the biodiversity, VMEs and scientific interest of this area.</li> </ul>
<b>Review periods</b>	It is recommended that this designation be reviewed every 10 years to collate any new information evaluating the justification for its BPA designation.



<b>Outline of monitoring and/or research needed</b>	<ul style="list-style-type: none"> <li>• A desk-top compilation of publications from research undertaken within this area would assist with future reviews of the designation.</li> <li>• Non-extractive research activities such as ROV monitoring of the area would be useful.</li> <li>• High-resolution bathymetric mapping and habitat delineation would be informative.</li> </ul>
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### Recommendation summary

<b>Bridle</b>			
<b>Risk</b>	<b>Objectives</b>	<b>Recommendation</b>	<b>Review</b>
<b>Fishing within this area with all gears could detrimentally impact the biodiversity, VMEs and scientific interest of this area.</b>	<ul style="list-style-type: none"> <li>• Protection of its geographic and/or unique representation;</li> <li>• Protection of potential VMEs.</li> <li>• Protection of deepwater elasmobranchs.</li> </ul>	Designate as a BPA and close to bottom fishing due to the presence of unique habitats, VME indicator taxa and deepwater elasmobranchs.	10 years

<b>Name</b>	<b>Coral</b>
<b>Proponents</b>	Australia, Cook Island, Japan and SIODFA
<b>Geographic description</b>	Area containing seamounts, ridges and a deep trench. <b>Coordinates:</b> 41°00' S, 42°00' E and 41°40' S and 44°00' E
<b>Objectives</b>	<ul style="list-style-type: none"> <li>• Protection of potential VMEs;</li> <li>• Protection of its bioregional representativeness;</li> <li>• Protection of biodiversity; and</li> <li>• Protection of an area of special scientific interest</li> </ul>
<b>Criteria that the protected area meets</b>	<p><b><u>This proposed area meets the following SC3 criteria:</u></b></p> <ul style="list-style-type: none"> <li>• 2a. VMEs are known to occur and/or triggering of VME indicator thresholds reported for the area proposed</li> <li>• 3b. Bioregional representation.</li> <li>• 5b. Biodiversity representation.</li> <li>• 6. Scientific interest.</li> </ul> <p><b><u>Feature description</u></b></p> <ul style="list-style-type: none"> <li>• A spreading centre with seamounts and ridges. Depths range from 4500 m to 200 m.</li> <li>• Contains intact cold-water corals at ~1000 m, with high densities of associated fauna including both corals, sponges, squat lobsters and echinoderms.</li> <li>• Only known example of a seamount with cold-water coral reef habitat lying in sub-Antarctic waters in the Southern Indian Ocean.</li> </ul> <p><b><u>Biodiversity representation</u></b></p> <ul style="list-style-type: none"> <li>• The upper flanks and summit of the seamount are coral gardens comprising Scleractinia and Octocorallia.</li> <li>• The coral framework at 1,000m largely comprised <i>Solenosmilia variabilis</i>.</li> <li>• Cold water coral reefs are located on the eastern flanks of the seamount at 1,000m depth.</li> <li>• Glass sponges also occur in high densities.</li> </ul> <p><b><u>Scientific interest</u></b></p> <ul style="list-style-type: none"> <li>• Been extensively studied.</li> <li>• Two new species of hippolytid shrimps have been described from this area.</li> </ul> <p><b><u>Areas of special significance for threatened or important species or ecosystem properties</u></b></p> <ul style="list-style-type: none"> <li>• Sharks and seabirds, particularly wandering albatross and white-chinned petrels, are very common over the seamount.</li> <li>• The water mass overlying the seamount is sub-Antarctic and hosts pelagic species completely different to those further north, including Antarctic myctophids, and pelagic grenadiers.</li> </ul>

	<ul style="list-style-type: none"> <li>The area is considered to be important for threatened, endangered or declining species and/or habitats.</li> </ul> <p><b><u>Fishing history</u></b></p> <ul style="list-style-type: none"> <li>There is an existing bottom longline fishery operating in this area including fishing vessels from Australia and the European Union.</li> <li>Early exploratory trawling indicated the presence of extensive coral formations and no subsequent trawling was undertaken.</li> <li>Some illegal gillnetting targeting deepwater sharks is thought to have occurred in the area.</li> </ul> <p><b><u>Other supporting information (if available)</u></b></p> <ul style="list-style-type: none"> <li>Listed as an Ecologically or Biologically Significant Area (EBSA).</li> </ul>
<b>Social, cultural and economic interests</b>	<ul style="list-style-type: none"> <li>It is possible that designation could have adverse economic impacts in terms of forgone trawl fishing opportunity.</li> <li>However, given, the recommendation for a gear specific closure, the very small area relative to the entire SIOFA fishing areas available and the long history of voluntary closure this lost opportunity is considered to be small.</li> </ul>
<b>Risks to the proposed area</b>	<ul style="list-style-type: none"> <li>Bottom trawl fishing within this proposed area could detrimentally impact the biodiversity and damage VMEs.</li> </ul>
<b>Review periods</b>	It is recommended that this designation be reviewed every 10 years to collate any new information evaluating the justification for its BPA designation.
<b>Outline of monitoring and/or research needed</b>	<ul style="list-style-type: none"> <li>A desk-top compilation of publications from research undertaken within this area would assist with future reviews of the designation.</li> <li>Non-extractive research activities such as ROV monitoring of the area would be useful.</li> <li>High-resolution bathymetric mapping and habitat delineation would be informative.</li> </ul>

### Recommendation summary

Coral			
Risk	Objectives	Recommendation	Review
<b>Bottom trawl fishing within this proposed area could detrimentally impact the biodiversity and damage VMEs.</b>	<ul style="list-style-type: none"> <li>Protection of potential VMEs;</li> <li>Protection of its bioregional representativeness;</li> <li>Protection of biodiversity; and</li> <li>Protection of an area of special scientific interest.</li> </ul>	Designate as a BPA and close to bottom fishing, except bottom longlining, due to the presence of unique habitats, VME indicator taxa and endemic species.	10 years

<b>Name</b>	<b>East Broken Ridge</b>
<b>Proponents</b>	Australia, Cook Island, Japan and SIODFA
<b>Geographic description</b>	Area of ridges and canyons. <b>Coordinates:</b> 32°50' S, 100°50' E and 33°25' S and 101°40' E
<b>Objectives</b>	<ul style="list-style-type: none"> <li>• Protection of its geographic and/or unique representation; and</li> <li>• Protection of VMEs</li> </ul>
<b>Criteria that the protected area meets</b>	<p><b><u>This proposed area meets the following SC3 criteria:</u></b></p> <ul style="list-style-type: none"> <li>• 4a&amp;b. Geographic and/or geomorphological representation.</li> </ul> <p><b><u>Feature description</u></b></p> <ul style="list-style-type: none"> <li>• This guyot (flat-topped, underwater volcanic mountain that was once above sea level but has since submerged) is characterised by numerous slips and canyons extending down the sides.</li> <li>• The feature rises from a depth of 3000 m to 1060 m.</li> </ul> <p><b><u>Biodiversity representation</u></b></p> <ul style="list-style-type: none"> <li>• Contains stands of brain and black coral 20 – 30 m high.</li> <li>• There appears to be strong upwelling over the south-west boundary which has resulted in favourable conditions for the growth of deepwater corals.</li> <li>• Believed to be almost pristine.</li> </ul> <p><b><u>Scientific interest</u></b></p> <ul style="list-style-type: none"> <li>• The area is relatively unexplored and unfished and would be an area of great scientific interest.</li> </ul> <p><b><u>Fishing history</u></b></p> <ul style="list-style-type: none"> <li>• Searches for fish aggregations have reportedly been undertaken, but only for a single day.</li> </ul>
<b>Social, cultural and economic interests</b>	<ul style="list-style-type: none"> <li>• It is possible that designation could have adverse economic impacts in terms of forgone trawl fishing opportunity.</li> <li>• However, given, the recommendation for a gear specific closure, the very small area relative to the entire SIOFA fishing areas available and the long history of voluntary closure this lost opportunity is considered to be small.</li> </ul>
<b>Risks to the proposed area</b>	<ul style="list-style-type: none"> <li>• Fishing within this proposed area could detrimentally impact the biodiversity and damage VMEs.</li> </ul>
<b>Review periods</b>	It is recommended that this designation be reviewed every 10 years to collate any new information evaluating the justification for its BPA designation.
<b>Outline of monitoring and/or research needed</b>	<ul style="list-style-type: none"> <li>• A desk-top compilation of publications from research undertaken within this area would assist with future reviews of the designation.</li> <li>• Non-extractive research activities such as ROV monitoring of the area would be useful.</li> <li>• High-resolution bathymetric mapping and habitat delineation would be informative.</li> </ul>

**Recommendation summary**

<b>East Broken Ridge</b>			
<b>Risk</b>	<b>Objectives</b>	<b>Recommendation</b>	<b>Review</b>
<b>Fishing within this proposed area could detrimentally impact the biodiversity and damage VMEs.</b>	<ul style="list-style-type: none"> <li>• Protection of its geographic and/or unique representation; and</li> <li>• Protection of VMEs.</li> </ul>	Designate as a BPA and close to bottom fishing due to the presence of unique habitats and VME indicator taxa.	10 years

<b>Name</b>	<b>Fools Flat</b>
<b>Proponents</b>	Australia, Cook Island, Japan and SIODFA
<b>Geographic description</b>	Seamount with a large flat deep area. <b>Coordinates:</b> 31°20' S, 94°55' E and 31°30' S and 95°00' E.
<b>Objectives</b>	<ul style="list-style-type: none"> <li>• Protection of potential VMEs;</li> <li>• Protection of its bioregional representation;</li> <li>• Protection of its geographic and/or unique representation;</li> <li>• Protection of its biodiversity.</li> </ul>
<b>Criteria that the protected area meets</b>	<p><b><u>This proposed area meets the following SC3 criteria:</u></b></p> <ul style="list-style-type: none"> <li>• 3b. Bioregional representation.</li> <li>• 4a&amp;b. Geographic and/or geomorphological representation.</li> <li>• 5b. Biodiversity representation.</li> </ul> <p><b><u>Feature description</u></b></p> <ul style="list-style-type: none"> <li>• Has a wide range of benthic habitat types.</li> <li>• Rises from 4,000m to 990 m with highly fractured topography.</li> <li>• Some indications that this feature may have been above sea level in the past.</li> <li>• The unique nature of this region comes from the presence of framework-building scleractinian coral reefs.</li> <li>• There are stands of brain and 20 – 30 m high black coral.</li> </ul> <p><b><u>Biodiversity representation</u></b></p> <ul style="list-style-type: none"> <li>• Believed to be biologically pristine with extensive coral reefs.</li> <li>• Possibly the largest area of cold-water coral habitat identified in any ocean.</li> </ul> <p><b><u>Fishing history</u></b></p> <ul style="list-style-type: none"> <li>• At least two fishing vessels are believed to have collected data in the past on the flat sedimented bottom at around 1,000m.</li> <li>• A single drawl set on the seamount stuck on the bottom and resulted in a catch of 3.5 tonnes of brain coral. No further fishing activity was undertaken on this feature.</li> </ul> <p><b><u>Other supporting information (if available)</u></b></p> <ul style="list-style-type: none"> <li>• Listed as an Ecologically or Biologically Significant Area (EBSA).</li> </ul>
<b>Social, cultural and economic interests</b>	<ul style="list-style-type: none"> <li>• Very little fishing effort has been expended in this area. It is possible that designation could have adverse economic impacts in terms of forgone opportunity.</li> <li>• However, given, the very small area relative to the entire SIOFA fishing areas available, the areas remoteness and the long history of voluntary closure this lost opportunity is considered to be small.</li> </ul>
<b>Risks to the proposed area</b>	<ul style="list-style-type: none"> <li>• Fishing within this area with all gears could detrimentally impact the biodiversity and damage VMEs.</li> </ul>
<b>Review periods</b>	It is recommended that this designation be reviewed every 10 years to collate any new information evaluating the justification for its BPA designation.

<p><b>Outline of monitoring and/or research needed</b></p>	<ul style="list-style-type: none"> <li>• A desk-top compilation of publications from research undertaken within this area would assist with future reviews of the designation.</li> <li>• Non-extractive research activities such as ROV monitoring of the area would be useful.</li> <li>• High-resolution bathymetric mapping and habitat delineation would be informative.</li> </ul>
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**Recommendation summary**

Fools Flat			
Risk	Objectives	Recommendation	Review
<p><b>Fishing within this area with all gears could detrimentally impact the biodiversity and damage VMEs.</b></p>	<ul style="list-style-type: none"> <li>• Protection of potential VMEs;</li> <li>• Protection of its bioregional representation;</li> <li>• Protection of its geographic and/or unique representation;</li> <li>• Protection of its biodiversity.</li> </ul>	<p>Designate as a BPA and close to bottom fishing due to the presence of unique habitats and VME indicator taxa.</p>	<p>10 years</p>



<b>Name</b>	<b>Gülden Draak</b>
<b>Proponents</b>	Australia, Cook Island, Japan and SIODFA
<b>Geographic description</b>	Large broken ridge and plateau. <b>Coordinates:</b> 28°00' S, 98°00' E and 29°00' S and 99°00' E
<b>Objectives</b>	<ul style="list-style-type: none"> <li>• Protection of potential VMEs;</li> <li>• Protection of its bioregional representativeness; and</li> <li>• Protection of its unique geological/geomorphological representativeness.</li> </ul>
<b>Criteria that the protected area meets</b>	<p><b><u>This proposed area meets the following SC3 criteria:</u></b></p> <ul style="list-style-type: none"> <li>• 3c. Bioregional representation.</li> <li>• 4a&amp;b. Geographic and/or geomorphological representation.</li> </ul> <p><b><u>Feature description</u></b></p> <ul style="list-style-type: none"> <li>• Large broken ridge and plateau extending beyond 10,000 km<sup>2</sup>.</li> </ul> <p><b><u>Biodiversity representation</u></b></p> <ul style="list-style-type: none"> <li>• Benthos is atypical of that found to the south and west, but there are few documented records of the faunal makeup of the area.</li> <li>• It is believed that the benthos is relatively pristine.</li> </ul> <p><b><u>Geographic and geomorphological representation</u></b></p> <ul style="list-style-type: none"> <li>• Submarine rifted continental fragment and comprises complex geological and geomorphological characteristics.</li> <li>• Regarded as a microcontinent.</li> <li>• The seafloor is particularly interesting and thought to be of terrestrial origin.</li> </ul> <p><b><u>Scientific interest</u></b></p> <ul style="list-style-type: none"> <li>• High resolution gravity modelling of the seamount was undertaken by Scripps Institution.</li> <li>• Detailed sea-floor maps were made during the search for the missing Malaysia Airlines Flight MH370.</li> <li>• Dredged samples have been taken and analysed.</li> <li>• Ocean Drilling Program Leg 183 explored the origin and evolution of the area.</li> </ul> <p><b><u>Fishing history</u></b></p> <ul style="list-style-type: none"> <li>• While subject of exploratory fishing the area has only rarely been visited over the past decade due to its remoteness.</li> <li>• Commercial fishes found in this area reportedly include several oreo species.</li> </ul>

<b>Social, cultural and economic interests</b>	<ul style="list-style-type: none"> <li>• The area has seldom been fished. It is possible that designation could have adverse economic impacts in terms of forgone opportunity.</li> <li>• However, given, the very small area relative to the entire SIOFA fishing areas available, the areas remoteness and the long history of voluntary closure this lost opportunity is considered to be small.</li> </ul>
<b>Risks to the proposed area</b>	<ul style="list-style-type: none"> <li>• Fishing within this area with all gears could detrimentally impact the relatively pristine area, biodiversity and complex geological and geomorphological features of this area.</li> </ul>
<b>Review periods</b>	It is recommended that this designation be reviewed every 10 years to collate any new information evaluating the justification for its BPA designation.
<b>Outline of monitoring and/or research needed</b>	<ul style="list-style-type: none"> <li>• A desk-top compilation of publications from research undertaken within this area would assist with future reviews of the designation.</li> <li>• Non-extractive research activities such as ROV monitoring of the area would be useful.</li> <li>• High-resolution bathymetric mapping and habitat delineation would be informative.</li> </ul>

### Recommendation summary

Gülden Draak			
Risk	Objectives	Recommendation	Review
<b>Fishing within this area with all gears could detrimentally impact the relatively pristine area, biodiversity and complex geological and geomorphological features of this area.</b>	<ul style="list-style-type: none"> <li>• Protection of potential VMEs;</li> <li>• Protection of its bioregional representativeness; and</li> <li>• Protection of its unique geological/geomorphological representativeness.</li> </ul>	Designate as a BPA and close to bottom fishing due to the potential presence VME indicator taxa and sensitive geology.	10 years

<b>Name</b>	<b>Mid-Indian Ridge</b>
<b>Proponents</b>	Australia, Cook Island, Japan and SIODFA
<b>Geographic description</b>	Structurally complex area with numerous seamounts the area is considered to be biologically pristine. <b>Coordinates:</b> 13°00'S - 64°00'E : 15°50'S - 68°00'E
<b>Objectives</b>	<ul style="list-style-type: none"> <li>• Protection of its unique geographic representation;</li> <li>• Protection of its high degree of naturalness; and</li> <li>• Protection of potential VMEs.</li> </ul>
<b>Criteria that the protected area meets</b>	<p><b>This proposed area meets the following SC3 criteria:</b></p> <ul style="list-style-type: none"> <li>• 2a. VMEs are known to occur and/or triggering of VME indicator thresholds reported for the area proposed</li> <li>• 3c. Bioregional representation</li> <li>• 4a&amp;b. Geographic and/or geomorphological representation.</li> </ul> <p><b>Feature description</b></p> <ul style="list-style-type: none"> <li>• Meeting point of the Australian, African and Indian tectonic plates.</li> <li>• An area of a series of 990 seamounts rising to 650m in warm waters.</li> </ul> <p><b>Biodiversity representation</b></p> <ul style="list-style-type: none"> <li>• Biologically pristine with corals that are vulnerable to deepwater fishing operations.</li> </ul> <p><b>Geographic and geomorphological representation</b></p> <ul style="list-style-type: none"> <li>• Geographically significant and contains over 990 seamounts.</li> </ul> <p><b>Fishing history</b></p> <ul style="list-style-type: none"> <li>• Thought to be unfished.</li> </ul>
<b>Social, cultural and economic interests</b>	<ul style="list-style-type: none"> <li>• It is possible that designation could have adverse economic impacts in terms of forgone opportunity.</li> <li>• However, given, the area has not had a historic fishery and the long history of voluntary closure this lost opportunity is considered to be small.</li> </ul>
<b>Risks to the proposed area</b>	<ul style="list-style-type: none"> <li>• Fishing within this area with all gears could detrimentally impact the biodiversity and fragile geology and biology of this area.</li> </ul>
<b>Review periods</b>	It is recommended that this designation be reviewed every 10 years to collate any new information evaluating the justification for its BPA designation.
<b>Outline of monitoring and/or research needed</b>	<ul style="list-style-type: none"> <li>• A desk-top compilation of publications from research undertaken within this area would assist with future reviews of the designation.</li> <li>• Non-extractive research activities such as ROV monitoring of the area would be useful.</li> <li>• High-resolution bathymetric mapping and habitat delineation would be informative.</li> </ul>

**Recommendation summary**

<b>Mid-Indian Ridge</b>			
<b>Risk</b>	<b>Objectives</b>	<b>Recommendation</b>	<b>Review</b>
<b>Fishing within this area with all gears could detrimentally impact the biodiversity and fragile geology and biology of this area.</b>	<ul style="list-style-type: none"> <li>• Protection of its unique geographic representation;</li> <li>• Protection of its high degree of naturalness; and</li> <li>• Protection of potential VMEs.</li> </ul>	Designate as a BPA and close to bottom fishing due to the sensitive geology of the area and presence of VME indicator taxa and the remote and pristine nature of this area.	10 Years

Name	Middle of What
Proponents	Australia, Cook Island, Japan and SIODFA
Geographic description	Area of seamounts and ridges. <b>Coordinates:</b> 37°54' S, 50°23' E and 37°56.5' S and 50°27' E
Objectives	<ul style="list-style-type: none"> <li>• Protection of its bioregional representativeness; and</li> <li>• Protection of potential VMEs.</li> </ul>
Criteria that the protected area meets	<p><b><u>This proposed area meets the following SC3 criteria:</u></b></p> <ul style="list-style-type: none"> <li>• 2a. VMEs are known to occur and/or triggering of VME indicator thresholds reported for the area proposed</li> <li>• 3a&amp;b. Bioregional representation.</li> </ul> <p><b><u>Feature description</u></b></p> <ul style="list-style-type: none"> <li>• Deep summit contained within in waters forming a dynamic boundary region between sub-Antarctic and sub-tropical water.</li> <li>• Spreading centre with seamounts and ridges with depths from 4500 m to 180 m.</li> </ul> <p><b><u>Biodiversity representation</u></b></p> <ul style="list-style-type: none"> <li>• Only known example of a seamount with cold-water coral reef habitat.</li> <li>• Cold water coral reef is located on the peak of the seamount at ~1,000m depth.</li> <li>• Intact stony coral reef is present with coral garden habitat containing large (2m tall) bamboo corals and stylasterids.</li> <li>• High densities of a range of other coral species, particularly octocorals and sponges. Glass sponges also occur at high density.</li> </ul> <p><b><u>Scientific interest</u></b></p> <ul style="list-style-type: none"> <li>• Studied by a number of research cruises.</li> <li>• Ophiuroid analysis indicate that 50% of the species are new to science.</li> </ul> <p><b><u>Areas of special significance for threatened or important species or ecosystem properties</u></b></p> <ul style="list-style-type: none"> <li>• Lantern sharks are very abundant.</li> <li>• High numbers of sharks were observed in the southern area.</li> <li>• Listed as an important area for threatened, endangered or declining species and/or habitats.</li> </ul> <p><b><u>Fishing history</u></b></p> <ul style="list-style-type: none"> <li>• Evidence of fishing on the seamount in the form of highly degraded and damaged coral habitat on the summit of the main feature.</li> <li>• This fishing ground was one targeted by vessels during the 'race for fish' which occurred in the period of 2000-2001, but there has been limited fishing since then.</li> </ul> <p><b><u>Other supporting information</u></b></p> <ul style="list-style-type: none"> <li>• Proposed as an Ecologically and Biologically Significant Area (EBSA).</li> </ul>

<b>Social, cultural and economic interests</b>	<ul style="list-style-type: none"> <li>• Designation could have adverse social, cultural or economic impacts in terms of forgone opportunity for fishing.</li> <li>• However, given, the very small area relative to the entire SIOFA fishing areas available and the long history of voluntary closure this lost opportunity is considered to be small.</li> </ul>
<b>Risks to the proposed area</b>	<ul style="list-style-type: none"> <li>• Fishing within this proposed area could detrimentally impact the representativeness of this area and degrade VMEs.</li> </ul>
<b>Review periods</b>	It is recommended that this designation be reviewed every 10 years to collate any new information evaluating the justification for its BPA designation.
<b>Outline of monitoring and/or research needed</b>	<ul style="list-style-type: none"> <li>• A desk-top compilation of publications from research undertaken within this area would assist with future reviews of the designation.</li> <li>• Non-extractive research activities such as ROV monitoring of the area would be useful.</li> <li>• High-resolution bathymetric mapping and habitat delineation would be informative.</li> <li>• Evaluate the recovery of the areas degraded by historic fishing.</li> </ul>

### Recommendation summary

Middle of What			
Risk	Objectives	Recommendation	Review
<b>Fishing within this proposed area could detrimentally impact the representativeness of this area and degrade VMEs.</b>	<ul style="list-style-type: none"> <li>• Protection of its bioregional representativeness; and</li> <li>• Protection of potential VMEs.</li> </ul>	Designate as a BPA and close to bottom fishing due to the presence of unique habitats, VME indicator taxa, high density of deepwater elasmobranchs, endemic species and long history of closure following high historic fishing effort.	10 years

<b>Name</b>	<b>Rusky Knoll</b>
<b>Proponents</b>	Australia, Cook Island, Japan and SIODFA
<b>Geographic description</b>	Single steep seamount. <b>Coordinates:</b> 31°20' S, 94°55' E and 31°30' S and 95°00' E
<b>Objectives</b>	<ul style="list-style-type: none"> <li>• Protection of its bioregional representativeness; and</li> <li>• Protection of potential VMEs.</li> <li>• Protection of deepwater elasmobranchs</li> <li>• Protection of areas important for threatened, endangered or declining species and/or habitats.</li> </ul>
<b>Criteria that the protected area meets</b>	<p><b>This proposed area meets the following SC3 criteria:</b></p> <ul style="list-style-type: none"> <li>• 2a. VMEs are known to occur and/or triggering of VME indicator thresholds reported for the area proposed.</li> <li>• 3b. Bioregional representation.</li> <li>• 7b. Areas of special significance for threatened or important species or ecosystem properties</li> </ul> <p><b><u>Feature description</u></b></p> <ul style="list-style-type: none"> <li>• Only known knoll that occurs on the central ridge.</li> <li>• Only structure that does not arise on the edge of the ridge</li> </ul> <p><b><u>Biodiversity representation</u></b></p> <ul style="list-style-type: none"> <li>• Local areas of rocky, coral garden and knoll/bank habitat exist.</li> <li>• Only known area containing black coral on Broken Ridge.</li> <li>• Benthos is atypical of that found to the south and west.</li> <li>• Listed as an Ecologically or Biologically Significant Area (EBSA).</li> <li>• High level of uniqueness.</li> <li>• Black coral have been observed as bycatch in fishing operations.</li> </ul> <p><b><u>Scientific interest</u></b></p> <ul style="list-style-type: none"> <li>• Habitat mapped by the University of Hawaii Mapping Group.</li> </ul> <p><b><u>Areas of special significance for threatened or important species or ecosystem properties</u></b></p> <ul style="list-style-type: none"> <li>• Important area for threatened, endangered or declining species and/or habitats.</li> <li>• Contains species that are vulnerable, fragility, sensitivity, or slow to recover.</li> </ul> <p><b><u>Fishing history</u></b></p> <ul style="list-style-type: none"> <li>• Some exploratory fishing is known to have occurred in the area.</li> <li>• Bottom-trawling has occurred on the knoll.</li> <li>• Trawling was restricted to one, possibly two tracks on the feature in the depth range 400 – 500 m and consequently, most of the feature should not have been affected by demersal trawling.</li> </ul> <p><b><u>Other supporting information</u></b></p> <ul style="list-style-type: none"> <li>• Proposed as an Ecologically and Biologically Significant Area (EBSA).</li> </ul>



<b>Social, cultural and economic interests</b>	<ul style="list-style-type: none"> <li>• The location of a historic fishery. It is possible that designation could have adverse economic impacts in terms of forgone opportunity.</li> <li>• However, given, the very small area relative to the entire SIOFA fishing areas available and the long history of voluntary closure this lost opportunity is considered to be small.</li> </ul>
<b>Risks to the proposed area</b>	<ul style="list-style-type: none"> <li>• Fishing within this proposed area could detrimentally impact the representativeness of this area and damage VMEs.</li> </ul>
<b>Review periods</b>	It is recommended that this designation be reviewed every 10 years to collate any new information evaluating the justification for its BPA designation.
<b>Outline of monitoring and/or research needed</b>	<ul style="list-style-type: none"> <li>• A desk-top compilation of publications from research undertaken within this area would assist with future reviews of the designation.</li> <li>• Non-extractive research activities such as ROV monitoring of the area would be useful.</li> <li>• High-resolution bathymetric mapping and habitat delineation would be informative.</li> </ul>

### Recommendation summary

Rusky Knoll			
Risk	Objectives	Recommendation	Review
<b>Fishing within this proposed area could detrimentally impact the representativeness of this area and damage VMEs.</b>	<ul style="list-style-type: none"> <li>• Protection of its bioregional representativeness; and</li> <li>• Protection of potential VMEs.</li> <li>• Protection of deepwater elasmobranchs</li> <li>• Protection of areas important for threatened, endangered or declining species and/or habitats.</li> </ul>	Designate as a BPA and close to bottom fishing due to the presence of VME indicator taxa, likely deepwater elasmobranchs and long period of closure following historic fishing effort.	10 years

<b>Name</b>	<b>South Indian Ridge</b>
<b>Proponents</b>	Australia, Cook Island, Japan and SIODFA
<b>Geographic description</b>	Complex area of seamounts adjacent to the CCAMLR region. <b>Coordinates:</b> 44°00'S, 40.878° 00'E, 44°00'S, 46.544° 00'E; 45°00'S, 42.124° 00'E, 45°00'S 45.711° 00'E
<b>Objectives</b>	<ul style="list-style-type: none"> <li>• Protection of potential VMEs;</li> <li>• Protection of its unique bioregional representativeness;</li> <li>• Protection of its geographic representation; and</li> <li>• Protection of its biodiversity.</li> </ul>
<b>Criteria that the protected area meets</b>	<p><b><u>This proposed area meets the following SC3 criteria:</u></b></p> <ul style="list-style-type: none"> <li>• 2a. VMEs are known to occur and/or triggering of VME indicator thresholds reported for the area proposed.</li> <li>• 3b. Bioregional representation.</li> <li>• 4a. Geographic representation.</li> <li>• 5b. Biodiversity representation.</li> <li>• 7b. Endangered, threatened or protected, or important species or ecosystem properties</li> </ul> <p><b><u>Feature description</u></b></p> <ul style="list-style-type: none"> <li>• An area of seamounts adjacent to the CCAMLR</li> <li>• Lies between Prince Edward and Marion Islands to the west and the Crozet Island.</li> </ul> <p><b><u>Biodiversity representation</u></b></p> <ul style="list-style-type: none"> <li>• Currently the Prince Edward and Crozet Islands (to the west and east, respectively) are protected as a nature reserve to safeguard the millions of birds and mammals that breed there every year.</li> <li>• The ichthyofauna and benthos in the region are characteristic of the subantarctic zone with some species being endemic.</li> <li>• The area contains vulnerability, fragile, sensitive, or species that are slow to recover.</li> </ul> <p><b><u>Geographic and geomorphological representation</u></b></p> <ul style="list-style-type: none"> <li>• Complex bathymetry, which may be a major factor affecting productivity of this region.</li> <li>• Lies between the plateaus where the seafloor feature includes a series of transform faults and associated fracture zones that may host hydrothermal vent communities.</li> </ul> <p><b><u>Scientific interest</u></b></p> <ul style="list-style-type: none"> <li>• Benthic surveys have been conducted on the shelf between the two Prince Edward islands, which may provide indications of the benthic characteristics of the broader area.</li> <li>• Detail on the physiography of the region, notes its unique geographic and geological characteristics.</li> </ul>

	<p><b><u>Areas of special significance for threatened or important species or ecosystem properties</u></b></p> <ul style="list-style-type: none"> <li>• The area is important for threatened, endangered or declining species and/or habitats.</li> <li>• Rare species have been reported foraging in these regions, and it is documented to be a driving area in the productivity of the Southwest Indian Ocean.</li> <li>• Foraging axis for seabirds, specifically white-chinned petrels, wandering and sooty albatrosses.</li> <li>• A foraging area for southern elephant seals.</li> </ul> <p><b><u>Fishing history</u></b></p> <ul style="list-style-type: none"> <li>• There is an existing bottom longline fishery operating in this area including fishing vessels from Australia and the European Union.</li> <li>• The area is largely untrawled.</li> <li>• However, some historical trawling may have occurred and some data may be available.</li> </ul> <p><b><u>Other supporting information (if available)</u></b></p> <ul style="list-style-type: none"> <li>• Listed as an Ecologically or Biologically Significant Area (EBSA).</li> </ul>
<p><b>Social, cultural and economic interests</b></p>	<ul style="list-style-type: none"> <li>• It is possible that designation could have adverse economic impacts in terms of forgone trawl fishing opportunity.</li> <li>• However, given, the recommendation for a gear specific closure, the very small area relative to the entire SIOFA fishing areas available and the long history of voluntary closure this lost opportunity is considered to be small.</li> </ul>
<p><b>Risks to the proposed area</b></p>	<ul style="list-style-type: none"> <li>• Bottom trawl fishing within this proposed area could detrimentally impact the biodiversity and damage VMEs.</li> <li>• Critical foraging area for endangered threatened and protected species which could interact with fishing gear resulting in mortality.</li> </ul>
<p><b>Review periods</b></p>	<p>It is recommended that this designation be reviewed every 10 years to collate any new information evaluating the justification for its BPA designation.</p>
<p><b>Outline of monitoring and/or research needed</b></p>	<ul style="list-style-type: none"> <li>• A desk-top compilation of publications from research undertaken within this area would assist with future reviews of the designation.</li> <li>• Non-extractive research activities such as ROV monitoring of the area would be useful.</li> <li>• High-resolution bathymetric mapping and habitat delineation would be informative.</li> <li>• Analysis of cryptic benthic species would be valuable.</li> </ul>

### Recommendation summary

South Indian Ridge			
Risk	Objectives	Recommendation	Review
<p><b>Bottom trawl fishing within this proposed area could detrimentally impact the biodiversity and damage VMEs. Critical foraging area for endangered threatened and protected species which could interact with fishing gear resulting in mortality.</b></p>	<ul style="list-style-type: none"> <li>• Protection of potential VMEs;</li> <li>• Protection of its unique bioregional representativeness;</li> <li>• Protection of its geographic representation; and</li> <li>• Protection of its biodiversity.</li> </ul>	<p>Designate as a BPA and close to bottom fishing, except longlining, due to the presence of unique habitats, VME indicator taxa and endemic species.</p>	<p>10 years</p>

<b>Name</b>	<b>Walter’s shoal</b>
<b>Proponents</b>	Australia, Cook Island, Japan and SIODFA
<b>Geographic description</b>	Spreading plateau with canyons, seamounts and ridges. <b>Coordinates:</b> 33° 00’N-43° 10’W : 33° 20’S -44°10’E
<b>Objectives</b>	<ul style="list-style-type: none"> <li>• Protection of potential VMEs;</li> <li>• Protection of its bioregional representativeness;</li> <li>• Protection of biodiversity; and</li> <li>• Protection of an area of special scientific interest.</li> </ul>
<b>Criteria that the protected area meets</b>	<p><b><u>This proposed area meets the following SC3 criteria:</u></b></p> <ul style="list-style-type: none"> <li>• 2a. VMEs are known to occur and/or triggering of VME indicator thresholds reported for the area proposed.</li> <li>• 3b. Bioregional representation.</li> <li>• 5b. Biodiversity representation.</li> <li>• 6. Scientific interest.</li> <li>• 7b. Endangered, threatened or protected, or important species or ecosystem properties</li> </ul> <p><b><u>Feature description</u></b></p> <ul style="list-style-type: none"> <li>• Spreading plateau with canyons, seamounts and ridges with depths rising from 4500 m to within 15 m of the surface.</li> <li>• The area has a high diversity of habitats.</li> </ul> <p><b><u>Biodiversity representation</u></b></p> <ul style="list-style-type: none"> <li>• Contains endemic fish and invertebrate species.</li> <li>• Described as highly diversity, habitats and species. Including coral species considered to be VME indicator taxa.</li> <li>• Cold-water carbonates such as algal and rhodolithes are abundant especially on top of the seamount but also on submerged terraces.</li> <li>• Has a high level of local retention, but also weakly connected to seamounts, plateaus and coastal ecosystems located north of 26°S, to the Mozambique Channel and the East African coast.</li> </ul> <p><b><u>Scientific interest</u></b></p> <ul style="list-style-type: none"> <li>• Long history of scientific research.</li> <li>• Over the years there have been several research cruises undertaken in this area which have led to new discoveries.</li> <li>• Several new endemic invertebrates and a new sub- species of crinoid have been described from this area.</li> <li>• Discovery of a new species of lobster, <i>Palinurus barbarae</i> (which was named after a friend of mine).</li> </ul> <p><b><u>Areas of special significance for threatened or important species or ecosystem properties</u></b></p> <ul style="list-style-type: none"> <li>• Is an important foraging ground for the red-tailed tropicbird and Barau’s petrel.</li> </ul>

	<ul style="list-style-type: none"> <li>Habitat for a variety of whale species, including sperm whales, humpback whales and short-finned whales</li> </ul> <p><b><u>Fishing history</u></b></p> <ul style="list-style-type: none"> <li>There is an existing bottom longline fishery operating in this area including fishing vessels from Australia and the European Union.</li> <li>Known to have been trawled on the western side in the past and bottom fished in the shallow areas. Lobster fishing has also been reported in shallow areas of sandy bottom</li> </ul> <p><b><u>Other supporting information (if available)</u></b></p> <ul style="list-style-type: none"> <li>Listed in the VME data base by the FAO.</li> </ul>
<b>Social, cultural and economic interests</b>	<ul style="list-style-type: none"> <li>It is possible that designation could have adverse economic impacts in terms of forgone trawl fishing opportunity.</li> <li>However, given, the recommendation for a gear specific closure, the very small area relative to the entire SIOFA fishing areas available and the long history of voluntary closure this lost opportunity is considered to be small.</li> </ul>
<b>Risks to the proposed area</b>	<ul style="list-style-type: none"> <li>Bottom trawl fishing within this proposed area could detrimentally impact the biodiversity and damage VMEs.</li> </ul>
<b>Review periods</b>	It is recommended that this designation be reviewed every 10 years to collate any new information evaluating the justification for its BPA designation.
<b>Outline of monitoring and/or research needed</b>	<ul style="list-style-type: none"> <li>A desk-top compilation of publications from research undertaken within this area would assist with future reviews of the designation.</li> <li>Non-extractive research activities such as ROV monitoring of the area would be useful.</li> <li>High-resolution bathymetric mapping and habitat delineation would be informative.</li> </ul>

### Recommendation summary

Walter’s shoal			
Risk	Objectives	Recommendation	Review
<b>Bottom trawl fishing within this proposed area could detrimentally impact the biodiversity and damage VMEs.</b>	<ul style="list-style-type: none"> <li>Protection of potential VMEs;</li> <li>Protection of its bioregional representativeness;</li> <li>Protection of biodiversity; and</li> <li>Protection of an area of special scientific interest.</li> </ul>	Designate as a BPA and close to bottom fishing, except longlining, due to the presence of unique habitats, the areas recognition as a VME and endemic species.	10 years