OVERVIEW OF EXISTING HIGH SEAS SPATIAL MEASURES AND PROPOSALS WITH RELEVANCE TO HIGH SEAS CONSERVATION

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German Federal Agency for Nature Conservation

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SUMMARY

This document is a compilation of existing spatial measures in areas beyond national jurisdiction, with a focus on those aimed at conserving high seas biodiversity. Additionally, *proposals* for additional spatial measures of protection, when known, have been noted.

As can be seen in the summary table below (Table 1), there exist several arrangements under which high seas spatial protection measures have been taken. However, existing spatial measures vary in the levels of protection provided, and arrangements that are available for some areas of the High Seas are not available for others. The criteria used in the selection (or rejection) of areas is often not available, and appears to vary widely. Clearly, the overall picture is not one of organised marine spatial planning. Nevertheless, the broad variety of existing arrangements clearly demonstrates that High Seas management and protection is indeed achievable, albeit in a piecemeal fashion.

Management assessments have generally not been conducted, making it difficult to judge how effective these existing measures have been, particularly with regard to compliance or enforcement. Furthermore, all the possible arrangements currently available have not been applied; for example, the International Seabed Authority has powers to designate *preservation* and *reference* areas to restrict High Seas seabed mining activities, though none as yet exist.

While some high seas protection proposals are under consideration, several others appear to be "orphans" without involvement of any existing process or regulatory authority through which they can be considered. This suggests a gap in current governance structures.

It is hoped that this document will facilitate discussion on cooperative ways to move forward such that high seas spatial protections can be more comprehensive and accountable.

The structure of this document will follow the ordering of Table 1, below. For the meanings of acronyms, please see Table 2, below.

Table 1: Summary of arrangements under which geographically specific high seas protection measures have been adopted.

Arrangements	***Current Measures***
Regional Fisheries Management Organisations (RFMOs) RFMOs in development	SEAFO: 10 bottom fishing closures; NEAFC: 8 bottom fishing closures; NAFO: 4 bottom fishing closures; GFCM: 3 trawl closures and trawl ban >1000m SPRFMO: precautionary trawl restrictions, and "frozen footprint"
Regional Seas Conventions	Barcelona Convention: Pelagos Sanctuary SPAMI. OSPAR Convention: Portugal has 1 MPA on its claimed extended continental shelf
Antarctic Treaty & CCAMLR	Antarctic Treaty: 16 ASPAs, 3 ASMAs; CCAMLR: several species-specific closures as well as 2 full fisheries closures, 2 CEMP monitoring sites, and area-wide gillnet ban and trawl ban
Other International Conventions	IMO (thru MARPOL): 2 Special Areas; IMO can also designate PSSAs, but there are none in ABNJ; IWC: 3 ocean basin whale sanctuaries
International Agreements	Pelagos Sanctuary for Mediterranean Marine Mammals (IT, FR, MC); Agreement Concerning the Shipwrecked Vessel RMS Titanic (US, UK, [FR], [CA] –square brackets signify not yet ratified)
Inter-governmental Organisations Voluntary Measures	Pacific Islands Forum: a ministerial call for precautionary trawl restrictions in the Western Tropical Pacific Islands Area SIODFA: 4 voluntary trawl closures on seamounts

Table 2: Acronyms used in Table 1, above, and throughout this document

ABNJ	Areas beyond national jurisdiction
ACCOBAMS	Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and contiguous Atlantic Areas
ASMA	Antarctic Specially Managed Area
ASPA	Antarctic Specially Protected Area
CA	Canada
CCAMLR	Convention on the Conservation of Antarctic Marine Living Resources
CEMP	CCAMLR Ecosystem Monitoring Program
EEZ	Exclusive Economic Zone
FR	France
GFCM	General Fisheries Commission for the Mediterranean
HS MPA	High seas marine protected area
IMO	International Maritime Organisation
IUCN	World Conservation Union
ISA	International Seabed Authority
IWC	International Whaling Commission
MARPOL	International Convention for the Prevention of Pollution from Ships (MARine POLlution)
MC	Principality of Monaco
MPA	Marine protected area
MuPA	Multiple-use planning area
NAFO	Northwest Atlantic Fisheries Organization
NEAFC	North East Atlantic Fisheries Commission
OSPAR	Oslo-Paris Agreement (NE Atlantic)
PIF	Pacific Islands Forum
PSSA	Particularly Sensitive Sea Area
RFMO	Regional fisheries management organisation
RMS	Royal Mail Steamer / Steam-Ship / Ship
SEAFO	South East Atlantic Fisheries Organisation
SIODFA	Southern Indian Ocean Deepwater Fishers' Association
SIOFA	Southern Indian Ocean Fisheries Agreement
SOx	Sulphur Oxides
SPAMI	Specially Protected Areas of Mediterranean Interest
SPREP	Pacific Regional Environment Programme
SPRFMO	South Pacific Regional Fisheries Management Organisation (in development)
SSSI	Sites of Special Scientific Interest
UK	United Kingdom
US	United States
USPA	Unique Science Priority Area
VTS	Vessel Traffic Services
WCPA	World Commission on Protected Areas
WTPIA	Western Tropical Pacific Islands Area

EXISTING SPATIAL MEASURES WITH RELEVANCE TO THE CONSERVATION OF HIGH SEAS BIODIVERSITY

REGIONAL FISHERIES MANAGEMENT ORGANISATIONS (RFMOS)

1. **General Fisheries Commission for the Mediterranean (GFCM)**
   A summary table of GFCM closures is in Annex 1. (Regarding protection in the Mediterranean, see also §7, below.)

   a. 2005: Closed to bottom trawling in waters deeper than 1000m throughout the Convention Area, most of which occur in the high seas.

   b. 2006: agreed to close to trawling three additional shallower areas: the Lophelia reef off Capo Santa Maria di Leuca; the Nile delta area cold hydrocarbon seeps; and, the Eratosthemes Seamount, all of which are beyond the 12 n. mi. territorial waters and therefore high seas in the Mediterranean (since most states have not made EEZ claims).

2. **South East Atlantic Fisheries Organisation (SEAFO)**
   A summary table of SEAFO closures is in Annex 1.

   a. Oct 2006: agreed all fishing activities for species covered by the SEAFO Convention shall be prohibited from 1 January 2007 to 31 December 2010 in 10 areas.

   b. The Commission shall consider at its 2007 Annual Meeting re-opening areas on a small scale and restricted exploratory fishery for an area not exceeding 20% of the fishable area of each seamount, starting Jan. 2008. The Scientific Committee will recommend to the Commission the representative areas that may be fished on each seamount.

3. **Northeast Atlantic Fisheries Commission (NEAFC)**
   A summary table of NEAFC closures is in Annex 1.

   a. Nov. 2004: agreed to close five areas to bottom fishing, from Jan. 2005 until the end of 2007 (Hecate, Altair, Antialtair and Faraday seamounts, and a large section of the Reykjanes Ridge).

   b. Nov. 2006: it was further agreed to close Hatton Bank and three areas of Rockall Bank to bottom fishing gear from 2007 to 2009. One other area, "South Rockall" (area: 3214.5 km^2) is still under consideration.

   c. NEAFC has also banned gillnet fishing in depths greater than 200m (due to the high discard rate of the deep gillnet fishery).

4. **North Atlantic Fisheries Organisation (NAFO)**
   A summary table of NAFO closures is in Annex 1.

   a. September 2006: agreed to protect four seamount areas from bottom fishing for a period of three years. These areas will be fully closed in 2007.

   b. But, as of 1st January 2008, 20% of the fishable area of each seamount may be opened to a small scale and restricted exploratory fishery. In the event hard corals are encountered, the fishery will be subject to closure. These measures will be reviewed in 2010 at which time they may be extended, or possibly made permanent.

RFMOs in Development

5. **South Pacific Regional Fisheries Management Organisation (SPRFMO)**
   This RFMO is not yet established. However, interim precautionary measures have been agreed to and will take effect from 30 September 2007, *inter alia*:

   a. In respect of areas where vulnerable marine ecosystems are known to occur or are likely to occur based on the best available scientific information, close such areas to bottom fishing unless, based on an assessment reviewed by the Scientific Working Group, conservation and management measures have been established to prevent significant adverse impacts on vulnerable marine ecosystems and the long-term sustainability of deep sea fish stocks, or it has been determined that such bottom fishing will not have significant adverse impacts on vulnerable marine ecosystems or the long term sustainability of deep sea fish stocks. [At the time of writing, August 2007, it is unclear if these areas have yet been identified.]

   b. Not expand bottom fishing activities into new regions of the Area where such fishing is not currently occurring. [At the time of writing, August 2007, it is unclear if these areas have yet been identified.]

   c. Starting in 2010, before opening new regions of the Area or expanding fishing effort or catch beyond existing levels, establish conservation and management measures to prevent significant adverse impacts on vulnerable marine ecosystems and the long-term sustainability of deep sea fish stocks from individual bottom fishing activities or determine that such activities will not have adverse impacts, based on an assessment undertaken by the Scientific Working Group.

Regional Seas Conventions

6. **OSPAR Convention**
   About 40% of the water column in the OSPAR Maritime Area is beyond national jurisdiction. However, due to ongoing continental shelf claims, it is currently unclear how much of the seafloor will be beyond national jurisdiction. OPSAR has committed to establish an "ecologically coherent" and "well-managed" network of MPAs by 2010, for the entire OSPAR Maritime Area, including its high seas.

   a. OSPAR marine protected areas (MPAs)
   To date, no MPAs have been proposed in areas beyond national jurisdiction (ABNJ), though one MPA (Rainbow Hydrothermal Vent) is on the extended continental shelf of Portugal, and as such, the waters above it are considered high seas.[1]

7. **Barcelona Convention**

   a. Specially Protected Areas of Mediterranean Interest (SPAMI)
   In 2001, the Pelagos Sanctuary for Mediterranean Marine Mammals was accepted by the Barcelona Convention as a SPAMI. It is in the Ligurian Sea, spanning internal and territorial waters of France, Italy, and the Principality of Monaco, as well as international

[1] In cases where the continental shelf extends beyond 200 nautical miles, the seafloor may be considered under the jurisdiction of the concerned party (generally up to 350 nm extension of the continental shelf, as provided by UNCLOS), but the water column above it will already be an ABNJ. In such cases, coordination and cooperation between OSPAR and the relevant Contracting Party(ies), as well as the relevant organisations with management authority over ABNJ in the OSPAR maritime area, will be required.

waters. It constitutes 46 371 km^2 in the high seas (87 492 in total). (See also §11, *Pelagos Sanctuary for Mediterranean Marine Mammals.*)

ANTARCTIC TREATY AND CCAMLR

8. **Antarctic**

The Antarctic Treaty applies to the area south of 60 degrees South Latitude. Currently, almost all countries consider Antarctic waters (south of 60 degrees latitude) up to the coastline as international waters, that is beyond national jurisdiction. The Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR) constitutes a part of the Antarctic Treaty system. CCAMLR's geographic scope is the same as that of the Antarctic Treaty Area, but it also includes "marine living resources" found within Antarctic Convergence, even when it extends beyond the 60th parallel. Although CCAMLR acts in many ways in the capacity of an RFMO, it is included here to keep Antarctic protections together under one section. Summary tables of Antarctic protected and managed areas are provided in Annex 2.

a. Antarctic Treaty –19 areas, 1833 km^2

i. Antarctic Specially Protected Areas (ASPAs, 16 areas): these are strictly managed areas whereby entry is by special permit only, and permitted activities such as scientific research and monitoring are regulated under management plans. There are six entirely marine ASPAs (with no terrestrial component at all), and a further ten ASPAs which include both marine and terrestrial components. The total marine area covered by these 16 ASPAs is 1783 km^2.

One proposed site containing a small, coastal marine component is under review (Amanda Bay [...], East Antarctica, ~18 km^2).

ii. Antarctic Specially Managed Areas (ASMAs, 3 areas) are designated to assist in the planning and coordination of activities to avoid potential conflicts, and minimise environmental impacts. Three (of a total of four) ASMAs have a marine component and are currently designated in areas where a high intensity of activities such as scientific research and tourism pose risks of cumulative environmental impacts. A permit for entry into an ASMA is not required, but activities are guided by a code of conduct. The total marine area of the three ASMAs is approximately 150 km^2.

One proposed site is under review (Southwest Anvers Island and Palmer Basin, Palmer Archipelago, with a large marine component of approx. 3000 km^2.) If designated, this will be the largest marine protected area within the Antarctic Treaty Area.

b. **Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR)**

i. CCAMLR Ecosystem Monitoring Program (CEMP, 2 areas): scientific monitoring sites can be protected. To date, however, only two of the 91 CEMP sites have explicit protections. These are to be reviewed every five years: Seal Is 0.9 km^2; Cape Shirreff [...] 4.5 km^2, which is also an ASPA (see §8.a.i, above).

ii. 2006-2008: adopted a temporary prohibition on bottom trawling in the high seas of the Convention Area. (Scientific research allowed. Prohibition will be reviewed in autumn 2007.)

iii. 2006: adopted an interim ban on gillnets and gillnet fishing (scientific research allowed in waters <100 m, but must apply for waters >100 m)

iv. Fishing for all fin-fish species is prohibited in two CCAMLR statistical subareas to the north of the Antarctic Peninsula (subarea 48.1 around the South Shetland Islands, and subarea 48.2 around the South Orkney Islands).

v. Several species-specific fishing closures; e.g. for toothfishes (*Dissostichus* spp), Grey Rockcod (*Lepidonotothen squamifrons*), and lantern fish (*Electrona carlsbergi*).

vi. 2006: ban on all shark fishing.

vii. Given the level of conservation and management measures in place, the entire area is sometimes considered equivalent to an IUCN Category IV protected area.

OTHER INTERNATIONAL CONVENTIONS

9. **International Maritime Organisation (IMO)**
The International Maritime Organization (IMO) can apply two types of spatial protection designations: Special Areas (related to pollution and discharges) through the MARPOL Convention; and Particularly Sensitive Sea Areas (PSSAs), developed through IMO Guidelines but not connected to any convention. The criteria are not mutually exclusive, and the two designations can overlap. Special Areas must meet several criteria and are in areas where oceanographic and ecological conditions, combined with vessel traffic, serve to create harmful concentrations or levels of pollution. PSSAs are areas of recognized ecological, socio-economic, or scientific significance whose attributes may be vulnerable to damage by international shipping activities. At the time of designation of a PSSA, an associated protective measure, which meets the requirements of the appropriate IMO instrument establishing such measure, must have been approved or adopted by IMO to address the threat or identified vulnerability.[2] PSSAs appear to be applicable to all waters including the high seas. To date, the high seas have not been the subject of any PSSA protections, but there are Special Areas that include the high seas of the Mediterranean and Antarctic waters.

a. MARPOL Special Areas
Annexes to MARPOL 73/78 define certain sea areas as Special Areas in which the adoption of special mandatory methods for the prevention of sea pollution is required. A full list of Special Areas can be found in Annex 3, below. Special Areas that include the high seas are as follows:

i. Annex I (no oily discharges): the Mediterranean Sea and the Antarctic area (south of 60°S).

ii. Annex II (no noxious liquid discharges): Antarctic area (south of 60°S)

iii. Annex V (no garbage discharge): Antarctic (south of 60°S)

b. Particularly Sensitive Sea Areas (PSSAs)
PSSAs are a product of the IMO through a series of Guidelines to enhance the comprehensive review and protection of specific areas under existing or potential IMO measures. Many specific IMO measures can be used to control the international shipping activities in PSSAs, such as routing measures, strict application of MARPOL discharge and equipment requirements for ships, such as oil tankers; and Vessel Traffic Services (VTS).

[2] Based on the wording of the Revised Guidelines for the Identification and Designation of Particularly Sensitive Sea Areas (IMO Res.A.982 (24)).

i. There are no PSSAs on the high seas.

ii. The following PSSAs have been designated in territorial and EEZ waters: the Great Barrier Reef, Australia (designated a PSSA in 1990); the Sabana-Camagüey Archipelago in Cuba (1997); Malpelo Island, Colombia (2002); the sea around the Florida Keys, United States (2002); the Wadden Sea, Denmark, Germany, Netherlands (2002); Paracas National Reserve, Peru (2003); Western European Waters (2004); Extension of the existing Great Barrier Reef PSSA to include the Torres Strait (proposed by Australia and Papua New Guinea) (2005); Canary Islands, Spain (2005); the Galapagos Archipelago, Ecuador (2005); the Baltic Sea area, Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland and Sweden (2005); Papahānaumokuākea Marine National Monument (Northwestern Hawaiian Islands), United States (2007).

10. **International Whaling Commission (IWC)**

a. **Whale Sanctuaries**

In 1982, the Commission took a decision, which came into force for the 1985/86 seasons that catch limits for all commercial whaling would be set to zero. However, before then whale sanctuaries were the established means by which to protect whales from commercial whaling in various regions of the high seas.

The first IWC sanctuary was established in the Antarctic in 1938, south of 40°S between longitudes 70°W and 160°W. In this area com mercial whaling had not yet occurred, and it was thought highly desirable to maintain the immunity which whales in this area had enjoyed. This sanctuary was continued by the IWC from its inception until 1955, when the area was opened initially for three years as a means of reducing the pressure of catches on the rest of the Antarctic whaling grounds.

In 1995, it was agreed by the IWC (res. 1995-8) that scientific whaling under Special Permit should also not occur within the whale sanctuaries. Particularly controversial is the Southern Ocean Sanctuary, whereby many resolutions have been passed urging Japan to cease its (minke) scientific whaling activities (e.g. res. 1994-10, 1995-8, 1996-7, 1997-5, 1998-4, 1999-3, 2000-4, 2001-7, 2003-3, 2005-1). Japan, which had originally lodged an objection to the creation of the sanctuary in 1994, continued to whale inside it, using its Special Permit for scientific research. From 1999-2002, Japan attempted to add schedules that would have allowed its whaling activities in the sanctuary, but these were voted down. In 2002, Japan submitted a proposal to abolish the Southern Ocean and Indian Ocean Sanctuaries altogether, but this was also voted down. This on-going dispute recently caught the public's attention in the 2006-2007 season, when both Greenpeace and the Sea Shepherd Conservation Society sent ships to document and harass the Japanese whalers.

i. 1938: Antarctic Sanctuary

ii. 1979: Indian Ocean Sanctuary

iii. 1994: Southern Ocean Sanctuary

iv. Proposed: South Atlantic and South Pacific, but to date both have failed to achieve 75% majority vote. (See also Annex 4: Pacific Islands Area, below.)

INTERNATIONAL AGREEMENTS

11. **Pelagos Sanctuary for Mediterranean Marine Mammals** (formerly the International Ligurian Sea Cetacean Sanctuary)
    25-Nov-1999, after ten years in the making, the sanctuary was ratified through a formal agreement with France, Italy, and the Principality of Monaco. It entered into force 21-Feb-2002, and was the first HS MPA in the world to be established through an international agreement outside of any existing conventions. In 2001, the Pelagos Sanctuary was accepted by the Barcelona Convention as a SPAMI (see §7.a, above).

12. **Agreement Concerning the Shipwrecked Vessel RMS Titanic**
    In 2000, the United States, United Kingdom, Canada, and France finalized the text of an agreement for the protection of the remains of RMS Titanic. The agreement has now been signed and ratified by the United Kingdom (2003); signed but not yet ratified by the United States (2004); and not yet signed or ratified by Canada and France. The UK has enacted implementing legislation. The US government has recently (July 2007) sought implementing legislation and Senate consent to allow for US ratification. The agreement aims to protect the site from human disturbances and salvage salvage under the jurisdiction and control of contracting parties. Full text:
    http://www.state.gov/g/oes/rls/or/2004/33709.htm

INTER-GOVERNMENTAL ORGANISATIONS

13. **Pacific Islands Forum (PIF)**
    The PIF was originally created to consider economic issues, trade, and cooperation amongst western tropical Pacific island states. It is bounded "by the exclusive economic zones of Pacific Island countries and territories in the tropical region and *any high seas enclaves enclosed by those exclusive economic zones*" (emphasis added). (See also Annex 4: Pacific Islands Area, below.)

    a. **Nadi Declaration**: Oct 2006, as part of PIF's 2006 Forum, Ministers from the 16 Member States adopted the *Declaration on Deep Sea Bottom Trawling to Protect Biodiversity in the High Seas*, setting forth a framework for addressing the problem of bottom trawling in the Western Tropical Pacific Islands Area (WTPIA). This calls for a temporary halt on bottom trawling. PIF members are committed "to urgently take actions consistent with international law to prevent destructive fishing practices on seamounts in the WTPIA and to prevent destructive fishing practices in other areas of high seas in the WTPIA until an appropriate environmental impact assessment has been carried out, effective conservation and management measures are implemented to protect affected ecosystems, and effective monitoring, control, surveillance and enforcement measures are in place to ensure that the measures are properly implemented and adhered to." However, such a commitment does not in itself constitute a formal agreement, and it still requires complementary national actions in order to be effective. [At the time of writing, August 2007, it is unclear what national actions have been taken.]

VOLUNTARY MEASURES

14. **Southern Indian Ocean Deepwater Fishers' Association (SIODFA)**

    a. July 2006: SIODFA announced voluntary closures in 11 high seas areas, 309 150 km^2, roughly the size of the Great Barrier Reef Marine Park. SIODFA represents four companies with a total of four vessels: Austral Fisheries Pty Ltd (Australia), Bel Ocean

II Ltd (Mauritius), Sealord Group (New Zealand) and TransNamibia Fishing Pty Ltd (Namibia) –the main trawling operators in this area. Although the press release discusses only bottom trawling, the operators have apparently also agreed to refrain from mid-water trawling, due to the difficulty of remotely differentiating between the two. To secure compliance, the companies will track their vessels' locations and activities via a satellite-based monitoring system. These voluntary closures contain 15 fishable seamounts, out of the more than 200 in the larger area (unpublished analysis by John Guinotte, Marine Conservation Biology Institute, 2006). These areas fall within the recently negotiated RFMO, South Indian Ocean Fisheries Agreement (SIOFA), which has not yet come into force.

HIGH SEAS MPA PROPOSALS

Below is an initial look at currently existing proposals. However, it should be noted that the IUCN WCPA-Marine High Seas Task Force is currently developing a list of 50 global high priority proposals for new HS MPAs, to be presented at the World Conservation Congress in Barcelona, 5-14 Oct. 2008.

USING EXISTING PROCESSES / ARRANGEMENTS

15. **Antarctic Treaty:** see §§ 8.a.i & ii, above**.**
16. **International Whaling Commission:** see §10.a.iv, above.
17. **Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and contiguous Atlantic Areas (ACCOBAMS)**
    a. 2004: eight MPAs, two of which include high seas areas (Alborán Sea and waters surrounding Malta and SE Sicily), were proposed as part of the Mediterranean Common Dolphin Conservation Plan;
    b. 2006: six important cetacean areas, two of which (Alborán Sea and Strait of Sicily) include high seas areas, proposed by the Scientific Committee will be recommended to ACCOBAMS parties in autumn 2007.
18. **OSPAR: Mid Atlantic Ridge/Charlie Gibbs Fracture Zone**
    WWF, 2006-2007 (OSPAR ICG-MPA doc. 07/4/1): Covers a large area: (620 000 km^2) situated entirely within the OSPAR high seas with no known continental shelf claims. It includes the seamounts Faraday, Hekate, and the section of the Reykjanes Ridge which were closed to bottom touching fishing gear by the North East Atlantic Fisheries Commission in 2004 (see § 3.a, above). This proposal will be undergoing further review and may be revised.

OUTSIDE OF EXISTING PROCESSES / ARRANGEMENTS

19. **Roadmap to Recovery**
    Greenpeace / Callum Roberts, March 2006: http://oceans.greenpeace.org/en/documents-reports/roadmap-to-recovery. This project actually contains two sets of global proposals:
    a. main proposal, modelled results: 25 large areas consisting of ~41% of the high seas, and capturing 40% of representative areas;
    b. Appendix 3, expert opinion: 41 areas of varying size identified by interviewed experts. These were not mapped, however.
20. **Marine Reserves for the Mediterranean Sea**
    Greenpeace, Jan. 2006: 32 MPAs are proposed, many of which appear to include the high seas, though this is not specified. 40% of each noted habitat is covered. Selection done by using GIS overlays. (http://www.greenpeace.org/raw/content/eu-unit/press-centre/reports/marine-reserves-for-the-medite.pdf)
21. **Unique Science Priority Areas (USPAs)**
    Hjalmar Thiel, 2003: a paper in the Ocean Challenge Journal suggests three "Unique Science Priority Areas" along the European Deep-Sea Transect in the NE Atlantic – Porcupine Seabight, Porcupine Abyssal Plain, BIOTRANS / BIO-C-FLUX areas. 100 nautical mile buffers on either side of the transect are proposed, resulting in an area of at

least 200 n. mi. x 500 n. mi. (~343 000 km^2). Mostly ABNJ, but the NE end extends into claimed Irish EEZ. Note, it is unclear what conservation protections USPAs might have, exactly, but it is very likely that commercial fishing would not be allowed.

OTHER AREAS OF INTEREST, NOT CURRENTLY ACTIVE PROPOSALS

22. **Ross Sea Shelf**
This has been identified by the IUCN WCPA-Marine (see IUCN RESWCC3.036). The suggestion is to create one large MPA, using a combination of Antarctic Specially Managed Areas and Antarctic Specially Protected Areas under Annex V of the Protocol, encompassing the Ross Sea continental shelf ecosystem. The wider Ross Sea is one of the two large embayments in the Antarctic continent. The Ross Sea shelf is physically contained within this embayment and lies south of the Antarctic Divergence. It lies west of 155°W in waters shallower than 3000m. The Ross Sea shelf can be distinguished from the wider Antarctic marine ecosystem. Its waters are highly productive and its healthy food web includes such charismatic marine megafauna as whales, seals and penguins.

23. **Abyssal Nodule Province in Pacific High Seas**
Seamounts and nodule-covered abyssal plains in the in the high seas of the Pacific harbour extraordinary biodiversity, but are also are targeted by destructive human activities, in particular bottom trawling; and are under consideration for others, mainly the mining of manganese crusts and nodules.

    Craig Smith and Tony Koslow are leading research to identify potential MPAs. A meeting is planned to develop recommendations to be communicated to the International Seabed Authority (ISA). Three meeting dates are currently under consideration: October 23-26, 2007; December 14-17, 2007; January 4-7, 2007.

24. **Sargasso Sea**
Under development by Sheila McKenna, WCPA-Marine High Seas Task Force. Details for this proposal are not yet available.

25. **Areas identified by S. Gubbay** (2003, HS MPA Workshop, Malaga, Spain)

    a. Arctic Mid-Ocean Ridge / Gakkel Ridge (based on http://www.mpch-mainz.mpg.de/~geo/Arctic/science.html). The Arctic Mid-Ocean Ridge (86°N, 90°E) extends from the Kolbeinsey Ridge at the northern margin of Iceland (~69°N, 17°30' W) to the termination of the Mid-Atlantic Ridge spreading system on the Laptev Shelf in the Arctic Ocean (~75°N, 130°E). Of the unexplored hydrothermal ridges, these are the most remote with almost every segment of the system being anomalous in some way.

    b. Antarctic Seamounts. The Pacific-Antarctic Ridge (62°S, 157°W) extends from a point midway between New Zealand and Antarctica northeast to where it joins the East Pacific Rise off the margin of South America. It is around 4 000 miles long and a number of seamounts have been discovered along it including the Foundation seamounts. There is little information available about these seamounts.

    c. Central Indian Ocean Ridge (based on Van Dover et al. 2001) A 275 km long section of the southern part of the Central Indian Ocean Ridge, from 23°S to the Rodriguez Triple Junction near 25° 30'S. The rift valley is between 5-8 km wide and has relief ranging from 500 m to 1000 m. Sites of particular interest in the area are the Kairei vent field, the Edmond vent field, and the Knorr Seamount. Previous unknown chemolithoautotrophic thermophilic and heterotrophic bacteria have been isolated from these vent fields.

d. Lord Howe Sea Mount Chain Lord Howe Rise (28°S, 161°E) extends from north of Lord Howe Island to the South Island of New Zealand. Part of the Lord Howe Rise lies within EEZs (of Australia and France (New Caledonia)) but sections also lie within international waters. Seamounts in this area that have been sampled are Argo, Kelso, Nova and Capel, which range in depth from 150-3000 m. These seamounts appear to be isolated marine systems.

26. **Costa Rican Dome**
This upwelling (8°N, 90°W) and possibly other upwellings off the west coast of Africa(10°N) and off the Indonesian coast (10°S) have been mentioned as possible HS MPA candidates.

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ANNEX 1: RFMO CLOSURES

(All area calculations in Albers Equal Area projections.)

Table 3: Summary of GFCM (Mediterranean) bottom fishing closures

GFCM Closures 2006	
Name	**Sq Km**
Eratosthemes Seamount	10 306.6
Capo Santa Maria di Leuca Lophelia Reef	943.4
Nile Delta Area Cold Hydrocarbon Seeps	4 360.2
TOTAL	**15 610.2**

Table 4: Summary of SEAFO (SE Atlantic) bottom fishing closures

SEAFO Closures 2007	
Name	**Sq Km**
Dampier	48 352.8
Malahit, Guyot	48 185.8
Molloy	43 599.4
Vema	10 533.5
Wust	20 612.4
Africana	19 627.9
Schmidt-Ott, Erica	116 186.8
Panzarini	37 924.7
Discovery, Junoy, Shannon	246 505.3
Schabenland, Herdman	78 170.3
TOTAL	**669 699.0**

Table 5: Summary of NEAFC (NE Atlantic) bottom fishing closures

NEAFC Closures 2005-07	
Name	**Sq Km**
Altair	1 191.7
Antialair	749.7
Faraday	1 250.9
Hekate	358.2
Reykjanes	20 663.9
Total	**24 214.4**

NEAFC Closures 2007-10	
Hatton	7 104.2
Logachev	2 167.6
NW Rockall	4 132.8
W Rockall Mounds	5 123.4
Total	**18 528.0**

Grand Total	**42 742.4**

Table 6: Summary of NAFO (NW Atlantic) bottom fishing closures

NAFO Closures 2007-10	
Name	**Sq Km**
Corner Seamount	40 253.2
New England Seamount	276 284.5
Newfoundland Seamount	15 410.9
Orphan Knoll	15 780.5
Total	**347 729.1**

ANNEX 2: ANTARCTIC

Current and proposed Antarctic Marine Protected Areas

(Courtesy Susie Grant)

The following tables list marine Antarctic protected and managed areas (including those with a terrestrial component) designated within the jurisdictional areas of the Antarctic Treaty and the Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR), as well as areas currently under proposal. This information is up to date as of June 2007.

Tables

7. Fully marine Antarctic Specially Protected Areas (ASPAs)*
8. Partially marine (i.e. including a terrestrial component) Antarctic Specially Protected Areas (ASPAs) *
9. Antarctic Specially Managed Areas (ASMAs)
10. Multiple-use Planning Areas (MuPAs)
11. ASPAs and ASMAs under proposal
12. CCAMLR Ecosystem Monitoring Program (CEMP) Protected Areas
13. Marine Protected Areas within the CCAMLR Convention Area under national jurisdiction

* Starred areas in these Tables are listed in Appendix 1 of ATCM Decision XXII-4 (1998) as being of interest to CCAMLR. Decision XXII-4 states that:

> For the purposes of implementation of Article 6(2) of Annex V to the Protocol on Environmental Protection, management plans requiring CCAMLR approval are those which include marine areas:
>
> 1) In which there is actual or potential harvesting affected by site designation.
> 2) For which there are provisions that might affect or restrict CCAMLR related activities.

NB: ASPA No. 161 (Terra Nova Bay) and ASPA No. 163 (Edmonson Point) are not listed in the above-mentioned Appendix 1 of ATCM Decision XXII-4 (1998), as they were designated subsequently. However, the designation of these sites also required CCAMLR approval.

Table 7: Fully Marine Antarctic Specially Protected Areas (ASPAs)

ASPAs are designed to provide strict protection for areas of outstanding environmental, scientific, historic, aesthetic or wilderness value. Entry into an ASPA is by special permit only, and permitted activities such as scientific research and monitoring are regulated under management plans.

Name	Location	Type / Status (previous designation in brackets)	Description	Reasons for proposal
Chile Bay (Discovery Bay), Greenwich Island*	South Shetland Islands	ASPA No. 144 (SSSI No. 26) Designated 1987 (Expiry 2005) *No CCAMLR approval to date*	Two small, fully marine, benthic areas. Marine area 0.8 km^2	High species diversity and biomass of benthic assemblages. Important area for long-term research programmes.
Port Foster, Deception Island*	South Shetland Islands	ASPA No. 145 (SSSI No. 27) *No CCAMLR approval to date* Designated 1987 (revised management plan adopted 2005 as part of Deception Island ASMA)	Two small, fully marine benthic areas. Marine area 1.9 km^2	Ecological interest due to volcanic nature of habitat. Important area for long-term research programmes.
South Bay, Doumer Island*	Palmer Archipelago	ASPA No. 146 (SSSI No. 28) *No CCAMLR approval to date* Designated 1987 (Expiry 2005)	Small, fully marine area of coastal and sub-tidal benthos, extending to 45 m depth. Marine area approx. 1.0 km^2	Variety of benthic habitats, important area for long-term research programmes.
Western Bransfield Strait (South of Low Island)*	South Shetland Islands	ASPA No. 152 (SSSI No. 35) *CCAMLR approval 2002* Designated 1991 (Current management plan adopted 2003)	Large, fully marine area, to approx. 200 m depth. Marine area approx. 900 km^2	One of only 2 known sites close to Palmer Station that is suitable for bottom trawling for fish and benthic organisms. Benthic fauna are of particular scientific interest.

Name	Location	Type / Status (previous designation in brackets)	Description	Reasons for proposal
Eastern Dallmann Bay (West of Brabant Island)*	Palmer Archipelago	ASPA No. 153 (SSSI No. 36) Designated 1991 *CCAMLR approval 2002* (Current management plan adopted 2003)	Large, fully marine area, to approx. 200m depth. Marine area approx. 580 km^2	One of only 2 known sites close to Palmer Station that is suitable for bottom trawling for fish and benthic organisms. Benthic fauna are of particular scientific interest.
Terra Nova Bay*	Ross Sea	ASPA No. 161 *CCAMLR approval 2002* Designated 2003	Small, coastal, fully marine area to approx. 200 m depth. Marine area approx. 30 km^2	High benthic diversity at species and community levels. Important area for well-established research, extensive marine ecological research carried out since 1985. Site typically remains ice-free during summer, which is rare for coastal areas in the Ross Sea, and makes it an ideal area for research into nearshore benthic communities.

Table 8: Partially Marine Antarctic Specially Protected Areas (ASPAs)

(These include both terrestrial and marine components.)

Name	Location	Type / Status	Description	Reasons for proposal
Beaufort Island, Ross Sea	North of Ross Island, Southern Ross Sea	ASPA No. 105 (SPA No. 5) *CCAMLR approval n/a* Designated 1966 (Current management plan adopted 1997)	Partially marine area, comprising the entire island and a small area of fast sea ice to the north. Marine area (fast ice) <0.5 km^2	Island supports substantial and varied avifauna, as well as significant vegetation areas, and is one of the most important breeding grounds in the region. Fast ice area is occupied by breeding Emperor penguins.
Emperor Island, Dion Islands, Marguerite Bay	South of Adelaide Island	ASPA No. 107 (SPA No. 8) *CCAMLR approval n/a* Designated 1966 (Current management plan adopted 2002)	Partially marine area. Includes Emperor Island itself, and extends 1km offshore to include Courtier Islands and Consort Islands and the intervening sea. Total area approx. 3 km^2. Marine area approx. 2 km^2	Area includes only known breeding population of Emperor penguins on West side of Antarctic Peninsula.

Name	Location	Type / Status	Description	Reasons for proposal
Southern Powell Island & adjacent islands	South Orkney Islands	ASPA No. 111 (SPA No. 15) *CCAMLR approval n/a* Designated 1966 (Current management plan adopted 1995)	Partially marine area, including shore of Fredriksen Island, Michelsen Island (tidal peninsula at the southern tip of Powell Island), Christoffersen Island, Grey Island and unnamed adjacent islands. Few observations on marine biota, but likely to be similar to nearby Signy Island area. Total area 18 km^2 Marine area <10 km^2	Islands support substantial vegetation and a considerable bird and mammal fauna. Area is representative of the natural ecology of the South Orkney Islands, and contained the nucleus of an expanding colony of Antarctic fur seals.
North Coronation Island	South Orkney Islands	ASPA No. 114 (SPA No. 18) *CCAMLR approval n/a* Designated 1985 (Current management plan adopted 2003)	Partially marine area comprising coastal ice free terrain with intervening sea. Marine area <30 km^2	Coastal ice-free terrain with large seabird colonies, lichen-dominated cliffs and permanent icefields. Terrestrial, ice and marine components of the Area comprise an integrated example of the coastal permanent ice and sublittoral ecosystems typical of the maritime Antarctic environment.
Cape Royds, Ross Island*	Ross Sea	ASPA No. 121 (SSSI No. 1) *CCAMLR approval 2002* Designated 1975 (Current management plan adopted 2002)	Small coastal area, with marine area extending 500 m offshore, including littoral and sublittoral zones. Marine area approx. 3 km^2	Marine area included to protect seaward access and nearshore feeding grounds of Adélie penguins. Important research area including monitoring of the most southerly Adélie penguin colony, and the inshore marine ecosystem (particularly studies of Nototheniid fish).
Cape Crozier, Ross Island	Ross Sea	ASPA No. 124 (SPA No. 6, then SSSI No. 4) *CCAMLR approval n/a* Originally designated 1966, re-designated as SSSI No. 4 in 1975 (Current management plan adopted 2002)	Coastal area with adjacent fast ice. Total area approx. 19 km^2 Marine area <5 km^2	Breeding site for Adélie penguins (on land) and Emperor penguins (on fast ice). Site of long-term studies of penguin population dynamics and social behaviour.

Name	Location	Type / Status	Description	Reasons for proposal
Harmony Point, Nelson Island	South Shetland Islands	ASPA No. 133 (SSSI No. 14) *CCAMLR approval n/a* Designated 1985 (Current management plan adopted 1997, revised management plan under development proposes exclusion of marine area)	Coastal area with adjacent ice and surrounding marine zone. Marine area <2 km^2	Diverse seabird community and extensive terrestrial vegetation. Good example of South Shetland Islands maritime Antarctic seabird community and terrestrial ecosystem, allowing long term research.
Cape Shirreff, Livingston Island*	South Shetland Islands	ASPA No. 149 (SPA No. 11, then SSSI No. 32, also CEMP Protected Area) Originally designated 1966, re-designated as SSSI No. 32 in 1990 *CCAMLR approval 1993, and revised management plan 2004* (Current management plan adopted 2005)	Low, ice-free peninsula and offshore island, with marine area between Cape Shirreff and San Telmo Island, and extending 100 m from eastern shore. Marine area approx. 4.5 km^2	Exceptional scientific and monitoring values associated with the large and diverse populations of seabirds and pinnipeds breeding within the area, which include the largest Antarctic fur seal colony in the Antarctic Peninsula region. CEMP studies include assessment of abundance, survival, feeding ecology and reproduction of pinnipeds and seabirds, and monitoring to detect and avoid possible adverse effects of fisheries on dependent species such as Antarctic fur seals and penguins.
Lion's Rump, King George Island*	South Shetland Islands	ASPA No. 151 (SSSI No. 34) *No CCAMLR approval to date* Designated 1991 (Current management plan adopted 2000)	Small coastal area including littoral and sub-littoral zones. Total area 1.3 km^2 Marine area <0.5 km^2	Representative examples of terrestrial, limnological and littoral habitats of the maritime Antarctic.
Edmonson Point*	Wood Bay, Ross Sea	ASPA No. 165 *CCAMLR approval 2005* Designated 2006	Nearshore marine environment extending 200 m offshore, and the intervening sea between two ice-free terrestrial areas. Marine area 2.74 km^2	Outstanding terrestrial and freshwater ecosystems. Long-term monitoring of Adélie penguins at this site has contributed to the CCAMLR Ecosystem Monitoring Programme. The nearshore sea ice (marine) area is used as a breeding site by Weddell seals, hence its inclusion in the proposed protected area as a representative location.

Table 9: Antarctic Specially Managed Areas (ASMAs)

ASMAs are designed to assist in the planning and coordination of activities to avoid potential conflicts, and minimise environmental impacts. A permit for entry into an ASMA is not required, but activities are guided by a code of conduct.

Name	Location	Type / Status	Description	Reasons for proposal
Admiralty Bay, King George Island	South Shetland Islands	ASMA No.1 (voluntary compliance since 1996) *CCAMLR approval 2005* Formally designated 2006	Comprises glacial drainage basin of Admiralty Bay, including marine area, and ASPA No. 128 (Western Shore of Admiralty Bay) Marine area approx. 120 km^2	Designated to reduce the risk of mutual interference in diverse human activities and to minimise environmental effects.
Cape Denison	George V Land, East Antarctica	ASMA No. 2 *CCAMLR approval n/a* Designated 2004	Coastal area including a small harbour. Marine area <0.5 km^2	Site of historic, archaeological, social and aesthetic values associated with the Australasian Antarctic Expedition led by Douglas Mawson (1911-1914). Area also includes important bird breeding sites, seal haul-out areas, vegetation and lakes.
Deception Island	South Shetland Islands	ASMA No. 3 *CCAMLR approval 2004* Designated 2005 (includes ASPA No. 145, Port Foster)	Comprises the whole of Deception Island and Port Foster. Marine area approx. 30 km^2	Unique Antarctic island with important natural, scientific, historic, educational, aesthetic and wilderness values. Benthic habitat of Port Foster is of ecological interest due to the natural perturbations caused by volcanic activity. Proposed to manage a variety of competing demands, including science, tourism, and the conservation of the island's natural and historic values.

Table 10: Antarctic Multiple-use Planning Areas (MuPAs)

This category has been superseded by the Antarctic Specially Managed Area (ASMA) category, and has no formal status. It remains under voluntary observance.

Name	Location	Type / Status	Description	Reasons for proposal
South-west Anvers Island and vicinity	Palmer Archipelago	MuPA (voluntarily adopted 1991. MuPA category now superseded by ASMA) *No formal CCAMLR approval* (see also Table F for proposed ASMA)	Large area encompassing several island groups, with intervening marine areas. Includes Palmer Station, Litchfield Island (ASPA No. 113) and Biscoe Point (ASPA No. 139). Total area approx. 1535 km^2	Diverse environmental features and scientific history. Area is important for long-term studies of the natural variability in Antarctic ecosystems, the effects of humans on Antarctic communities, and the possible effect of global change on the Antarctic environment and on the physiology and behaviour of its plants and animals.

Table 11: (Antarctic) ASPAs and ASMAs under proposal

Name	Location	Type / Status	Description	Reasons for proposal
Southwest Anvers Island and Palmer Basin	Palmer Archipelago	ASMA proposed 2007 (management plan currently under review)	Large area encompassing a coastal strip on Anvers Island, and several island groups, with the intervening marine area including the Palmer Basin. Area includes Palmer Station, Litchfield Island (ASPA No. 113) and Biscoe Point (ASPA No. 139). Total area (terrestrial and marine components) 3275 km^2	To conserve and protect the unique and outstanding environment of the southwest Anvers Island and Palmer Basin region by managing the variety of activities and interests in the Area. The Area requires special management to ensure that these important values are protected and sustained in the long-term, especially the extensive scientific data sets collected over the last 100 years. Increasing human activity and potentially conflicting interests have made it necessary to manage and coordinate activities more effectively within the Area. (see also Table D – Multiple Use Planning Area)
Amanda Bay, Ingrid Christensen Coast, Princess Elizabeth Land	East Antarctica	ASPA proposed 2007 (management plan currently under review)	Small area encompassing rocks, islands, and intervening sea (including fast ice). Total area approx. 18 km^2	The Area includes an emperor penguin breeding colony of approx. 2500 pairs, located on the fast ice. Protection for the area is proposed to minimise human disturbance to the emperor penguin colony, and to allow research and monitoring of the colony.

Name	Location	Type / Status	Description	Reasons for proposal
Balleny Islands	Northern Ross Sea	First proposed by New Zealand in 1999 as an extension to an existing SPA at Sabrina Island. Later proposed as a "Biodiversity Preserve" in 2000. Also suggested that proposal should be altered from an ASPA to an ASMA. *CCAMLR approval was not given during initial reviews* Potential new management plan and possible boundaries still under discussion. No new proposal currently exists.	Boundary proposals have included offshore limits of 12 nm, 50 nm and 200 nm.	Area includes important biodiversity and is a good representation of a unique ecosystem. "Biodiversity Preserve" aimed to protect outstanding environmental, scientific, aesthetic and wilderness values of the area.

Table 12: CCAMLR Ecosystem Monitoring Program (CEMP) Protected Areas

CEMP Sites may be afforded protection under CCAMLR Conservation Measures. The areas listed below are the only two CEMP Sites for which this is has been done.

Name	Location	Type / Status	Description	Reasons for proposal
Seal Islands	South Shetland Islands	CEMP Protected Area (adopted as CEMP site 1991, afforded CEMP protection 2000) *CCAMLR approval 2000*	Small islands to north of Elephant Island, approx. 0.9 km^2	Important site for research on Antarctic fur seal and chinstrap penguin populations. (Research at this site was terminated in 1994, and is not expected to continue. All camp structures were dismantled in 1996 and 1999).
Cape Shirreff, Livingston Island	South Shetland Islands	CEMP Protected Area (adopted as ASPA 1994, afforded CEMP protection 2000) *CCAMLR approval 2000* (see also ASPA No. 149)	Low, ice-free peninsula and offshore island, approx. 3.47 km^2 Marine area (see ASPA No. 149)	(see ASPA No. 149) CEMP studies include assessment of abundance, survival, feeding ecology and reproduction of pinnipeds and seabirds, and monitoring to detect and avoid possible adverse effects of fisheries on dependent species such as Antarctic fur seals and penguins.

Table 13: MPAs within the CCAMLR Convention Area under national jurisdiction

The sub-Antarctic islands of South Georgia and the South Sandwich Islands, Bouvetøya, Prince Edward and Marion Islands, Crozet Islands, Kerguelen Islands and Heard Island and McDonald Islands are within the CCAMLR Convention Area. However, they are north of 60°S and therefore outside the Antarctic Treaty area and under national jurisdiction. Conservation and management measures may be implemented under national jurisdiction within the territorial seas and Exclusive Economic Zones (EEZs) of these islands in addition to measures provided by CCAMLR.

Name	Location	Type / Status	Description	Reasons for proposal
Heard Island and McDonald Islands Marine Reserve	Kerguelen Plateau	Marine reserve under national jurisdiction of Australia. Declared in 2002.	Includes the World Heritage listed islands and the Territorial Sea, plus 4 fully protected marine areas to a depth of 1000 m, extending in parts to the 200 nm EEZ boundary. No commercial fishing is permitted in fully protected areas. Marine area 65,000 km^2	The area contains diverse and distinctive benthic habitats, several endemic fish and benthic species, and nursery areas for a range of fish stocks including Patagonian toothfish. It is a highly productive, nutrient-rich area, and a foraging area for a number of land-based marine predators, including threatened albatross and seal species.
Ile Kerguelen, Ile Crozet, Ile Amsterdam and Ile Saint-Paul	Southern Indian Ocean	Marine protected area under national jurisdiction of France. Declared in 2006.	No information available Marine area 15,700 km^2	No information available.
Prince Edward Islands	Southern Indian Ocean	Marine protected area under national jurisdiction of South Africa. Proposal for extended marine protected area under development.	No fishing zone currently extends 12 nm offshore. An extended MPA within the South African EEZ is under proposal.	Aims to reduce IUU fishing, allow recovery of the ecosystem and stocks of Patagonian toothfish, reduce threats to albatrosses and petrels, reduce and avoid impacts on the benthic habitat from destructive fishing practices, and provide reference habitat to inform future management.

ANNEX 3: MARPOL SPECIAL AREAS

Table 14: Special Areas under MARPOL 73/78, with high seas areas underlined

Adoption, entry into force and date of taking effect of Special Areas			
Special Areas	**Adopted[#]**	**Date of Entry into Force**	**In Effect From**
Annex I: Oil			
Mediterranean Sea	2 Nov 1973	2 Oct 1983	2 Oct 1983
Baltic Sea	2 Nov 1973	2 Oct 1983	2 Oct 1983
Black Sea	2 Nov 1973	2 Oct 1983	2 Oct 1983
Red Sea	2 Nov 1973	2 Oct 1983	*
"Gulfs" area	2 Nov 1973	2 Oct 1983	*
Gulf of Aden	1 Dec 1987	1 April 1989	*
Antarctic area	16 Nov 1990	17 Mar 1992	17 Mar 1992
North West European Waters	25 Sept 1997	1 Feb 1999	1 Aug 1999
Oman area	15 Oct 2004	1 Jan 2007	*
Southern South African waters	13 Oct 2006	1 March 2008 **	
Annex II: Noxious Liquid Substances			
Baltic Sea	2 Nov 1973	6 April 1987	6 April 1987
Black Sea	2 Nov 1973	6 April 1987	*
Antarctic area	30 Oct 1992	1 July 1994	1 July 1994
Annex V: Garbage			
Mediterranean Sea	2 Nov 1973	31 Dec 1988	*
Baltic Sea	2 Nov 1973	31 Dec 1988	1 Oct 1989
Black Sea	2 Nov 1973	31 Dec 1988	*
Red Sea	2 Nov 1973	31 Dec 1988	*
"Gulfs" area	2 Nov 1973	31 Dec 1988	*
North Sea	17 Oct 1989	18 Feb 1991	18 Feb 1991
Antarctic area	16 Nov 1990	17 Mar 1992	17 Mar 1992
Wider Caribbean region including the Gulf of Mexico and the Caribbean Sea	4 July 1991	4 April 1993	*
Annex VI: Prevention of air pollution by ships (SOx Emission Control Areas)			
Baltic Sea	26 Sept 1997	19 May 2005	19 May 2006
North Sea	22 July 2005	22 Nov 2006	22 Nov 2007

Status of multilateral conventions and instruments in respect of which the international maritime organization or its secretary general perform depositary or other functions as at 31 December 2002

* The Special Area requirements for these areas have not taken effect because of lack of adequate reception facilities, and lack of ratification of the Convention by coastal States concerned.

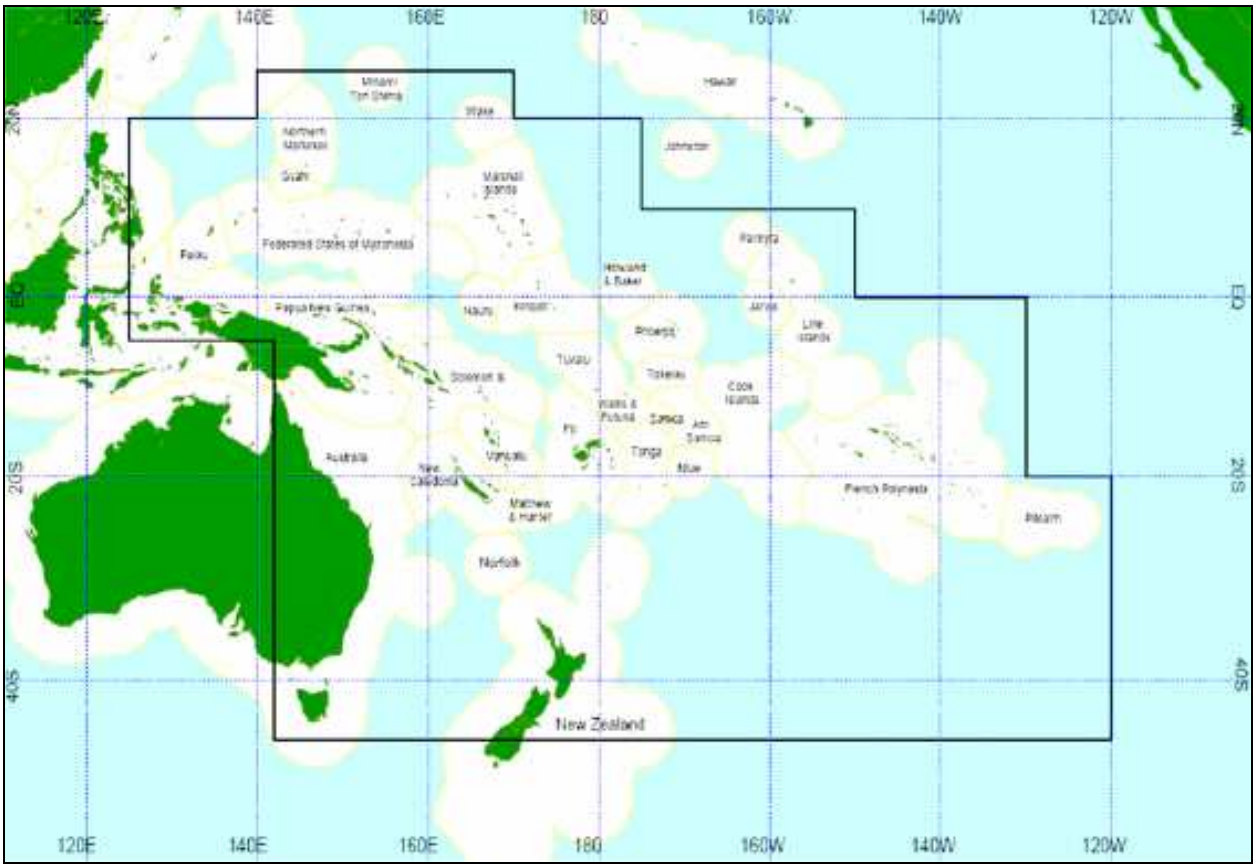
** Expected date of entry into force

Source:
http://www.oceansatlas.com/unatlas/issues/pollutiondegradation/special_areas/particularly_sensitive_sea_areas.htm#List%20of%20adopted%20PSSAs

ANNEX 4: PACIFIC ISLANDS AREA

Within the Pacific Islands Area, much of the area is covered by EEZs, and thus much of the region's deep sea environments are also within EEZs. High seas areas are sometimes completely or nearly surrounded by EEZs (Figure 1).[3] However, notwithstanding the proposed South Pacific Whale Sanctuary (see §10.a.iv, above) and the call for action regarding bottom trawling as contained in the Nadi Declaration (see §13.a, above), as well as active efforts by some Pacific island states to apply spatial protections within their EEZs, there have been no *high seas* spatial protections yet established in the Pacific Islands Region.

Figure 1: Pacific Islands Area, showing EEZs (white) and high seas (blue). Source: SPREP.



[3] The exact boundaries of various Pacific Islands organisations vary. For example, the boundary of the Pacific Islands Forum (PIF), differs from the general regional boundary shown above.

ANNEX 5: HS MPA RESEARCH [INCOMPLETE]

Examples of research that could contribute to identification of HS MPAs

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