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POLICY GAP ANALYSIS ON MARINE FLYWAYS

(Prepared by the Flyways Working Group - Seabirds Sub-Group)

Summary:

This document provides background information on the six marine flyways focusing on CMS Party coverage and opportunities for policy and conservation action in order to guide the draft Resolution and draft Decisions on Seabirds, Marine Flyways and relevant threats, such as bycatch at COP15. It has been developed by the Seabirds Thematic Sub-group of the CMS Working Group on Flyways in response to the mandate set out in Resolution 12.11 (Rev.COP14) *Flyways*, and specifically Decision 14.140 f) directed to the Flyways Working Group and Decision 14.142 directed to the Secretariat.

POLICY GAP ANALYSIS ON MARINE FLYWAYS

Background

1. CMS was drafted with flyways in mind and has since its inception successfully advanced policy action for terrestrial and coastal flyways, with well-established examples of improved conservation outcomes. However, the oceans are notably absent from flyways approaches under CMS, and are the missing "jigsaw piece" to advance flyways globally. CMS is ideally placed to bring forward policy action for marine flyways.

2. Six marine flyways have been identified across the four global ocean basins, based on seabird tracking data[1]. These flyways are broad oceanic routes used cyclically and predictably by multiple pelagic, migratory seabird populations and species. The flyway approach provides a useful and pragmatic framework for the conservation of pelagic seabirds by directing and prioritising coordinated management actions at an ocean-basin scale. It acknowledges cumulative impacts of threats, and through highlighting broad movement patterns and shared responsibility, facilitates the incorporation of migratory connectivity into policy. In addition to the long-term experience in flyways there is a wealth of experience on seabird conservation action within the CMS Family, including the Agreement on the Conservation of Albatrosses and Petrels (ACAP) and the African-Eurasian Waterbird Agreement (AEWA).

3. Action on marine flyways under CMS is timely for at least two reasons: firstly, because seabirds are one of the most threatened groups of birds, and secondly, because the new 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 Agreement) enters into force on 17 January 2026[2] and provides a much needed holistic governance framework for advancing conservation action for seabirds in these (often referred to as the High Seas Agreement). There is now an opportunity to build upon decades of this seabird and flyways experience, strong networks of supporters and political momentum for High Seas conservation.

4. This document outlines where potential lies, both in terms of geography and conservation action, for tackling threats facing seabirds, such as bycatch, climate change, invasive species and disturbance from growing levels of maritime infrastructure. It will also highlight the gaps, where seabird populations remain of conservation concern and existing policy frameworks and other measures have not yet delivered for these migratory species. Additional information on species covered and a definition of the marine flyways can be found in the COP15 document on Seabirds and Marine Flyways, including Annexes (UNEP/CMS/COP15/Doc.26.3.2).

High-level recommendations:

A. **Establish collaborative framework for the marine flyways:** develop an initiative to optimize synergies among international frameworks (formal and informal), including the BBNJ Agreement, Regional Fisheries Management Organizations (RFMOs), and key stakeholders from governments, academia and non-profit as well as for-profit sectors with a strong commitment to ocean conservation.
B. **Develop multi-species action plans:** consider the development of multi-species action

[1] Morten et al. 2025 Global Marine Flyways Identified for Long-Distance Migrating Seabirds from Tracking Data. *Global Ecology and Biogeography*, Vol. 34, Issue 2. https://doi.org/10.1111/geb.70004
[2] https://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg_no=XXI-10&chapter=21&clang=_en&_gl=1*r9a9cm*_ga*MTA1NTQ2NDI5NC4xNzUyODQ0ODI2*_ga_TK9BQL5X7Z*czE3NTg2MzAyNjMkbzEyJGcwJHQxNzU4NjMwMjYzJGo2MCRsMCRoMA..

plans for the marine flyways under CMS by COP16, building on a planned assessment by the Flyways Working Group that outline a series of priority actions.

C. **Conduct situation analysis for marine flyways:** conduct individual or a full situation analysis for the marine flyways for COP16 that aim(s) to cover the status of migratory seabirds and priority needs across all six marine flyways, following the format used for the Central Asian Flyway.[3]
D. **Close gaps in CMS Parties across the marine flyways:** encourage non-Parties with national waters overlapping the marine flyways to accede to CMS and relevant Agreements, notably in South-East Asia, the west coast of Africa and North America.
E. **Close gaps in species listings:** in line with Resolution 14.20 *Potential Avian Taxa for Listing* and Annex B of the COP15 Resolution *Seabirds and the Marine Flyways*, submitted to COP15, consider listing additional qualifying seabird species on the Appendices of the Convention.
F. **Identify and safeguard important sites:** recognizing that seabird data are a valuable and established tool to identify areas suitable for protection, including in the High Seas, identify a coherent network of sites (i.e. Key Biodiversity Areas) for seabird species found to be using all or part of the marine flyways, across their full life cycle (e.g. breeding, foraging, non-breeding) within each of the marine flyways by 2030 to support the conservation of at least 30% of the ocean, in line with Target 3 of the Kunming-Montreal Global Biodiversity Framework.
G. **Strengthen the ecological connectivity of the Marine Protected Areas network:** to improve the conservation of migratory species and the resilience of seabird populations to climate change, promote an ecologically coherent network of safeguarded critical sites across land and sea.
H. **Address causes of direct mortality:** eradicate invasive and non-native species at seabird colonies with ongoing biomonitoring, reduce or eliminate seabird bycatch, regulate unsustainable take, and prevent disease outbreaks.
I. **Reduce indirect mortality:** Protect key foraging areas and restore fish populations that seabirds depend upon for food ('forage fish'); mitigate impacts of problematic native species (i.e. competition for space or food); reduce disturbance to seabirds at colonies or at sea; manage light pollution at sea (e.g. vessels) and on land near vulnerable seabird colonies; reduce ocean pollution; improve resilience of seabird populations to better withstand impacts of climate change.
J. **Plan for emerging pressures:** monitor and prevent habitat loss, collisions and disturbance due to maritime infrastructure (e.g. offshore wind farms) and associated vessel traffic, as well as negative impacts of new fisheries, plastic pollution and other emerging threats.
K. **Research gaps:** address knowledge gaps (identified in C and J) in order to effectively safeguard seabird populations, which may include improved understanding of poorly studied species or life-history stages (e.g. juveniles), spatial and temporal understanding of major pressures (e.g. bycatch), identification of mitigation measures for known threats (e.g. fixed nets), and improved understanding of poorly known threats (e.g. light pollution at sea).
L. **Provide education and information:** improve national awareness, support and understanding of the ecosystem services provided by seabirds and the marine flyways.
M. **Secure financing:** increase the funding for the conservation of seabirds across the marine flyways by considering voluntary contributions, as well as philanthropic funding and innovative funding options such as blue finance.
N. **Strengthen capacity:** build and strengthen local and national capabilities to implement seabird conservation measures across the 35 CMS Parties overlapping the marine

3 Central Asian Flyway Situation Analysis 2023: The status of migratory birds and their habitats and recommendations for their conservation (UNEP/CMS/COP14/Inf.28.4.2) https://www.cms.int/cami/sites/default/files/document/cms_cop14_inf.28.4.2_central-asian-flyway-situation-analysis-2023_e.pdf

flyways and the additional five CMS Parties with important colonies.

O. **Exploit synergies across ocean governance instruments:** encourage all Parties and stakeholders to make use of the synergies across governance instruments identified in this policy gap analysis to strengthen policy for marine flyways across relevant treaties and organizations. Ensure that the experience and best practice regulation from instruments such as ACAP are applied, as appropriate, across the marine flyways for all seabirds, including within the relevant Regional Fisheries Management Organizations (RFMOs). Given that bycatch and prey depletion are primary threats to seabirds, close dialogue between the CMS Family instruments and the RFMOs, also in the context of the BBNJ Agreement, should be encouraged.

The critical role of seabirds in the ocean and beyond

5. Seabirds provide critical ecosystem services to the ocean, transferring at least 80-100 million metric tons of biomass across ocean basins and coasts each year[4]. This is equivalent to 2 million fully loaded trucks, enough to stretch around the Earth's equator more than twice (if lined up end to end). This vast level of biomass transfer and guano fertilization (rich in e.g. nitrogen, phosphorus and iron) has multiple ecosystem service benefits, spanning nutrient cycling, trophic regulation and habitat fertilization. The condition of coastal ecosystems such as coral reefs including fish populations and phytoplankton levels, for example, has been shown to thrive when the adjacent seabird colonies are healthy[5]. The impact of these services is particularly important in nutrient-poor or remote marine systems such as some coral reef ecosystems, the Southern Ocean and in the polar regions.

6. Other ecosystem services provided by seabirds include seed and microbial dispersal, maintaining ecosystem balance as top predators in various habitats, and contributing to carbon cycling through organic materials such as carcasses and feces sinking to deeper ocean levels. Table 1 highlights the ways in which seabirds support various Sustainable Development Goals (SDGs).

7. For thousands of years, Indigenous Peoples and local communities have held seabirds in high regard, as they play significant roles in traditional cultures, storytelling, art, religion, and literature. Seabirds have also historically been a source of food, medicine, insulation (through their feathers), and various other uses. Today, seabirds, such as common eider ducks, continue to provide income and small-scale employment. In a few Indigenous Peoples and local communities the harvesting of seabird meat, eggs, oil, and feathers is still legally practiced (e.g. Iceland, New Zealand).

8. Last but not least, seabirds are excellent indicators of areas of importance in the ocean that would benefit from protection. Areas identified as important for seabirds, have also been found to be hotspots of wider marine biodiversity. Because seabirds breed on land, they are relatively accessible compared to other marine megafauna and consequently they are the best studied marine megafauna. Thanks to advances in satellite tracking technology, there is a good level of understanding of seabird abundance and distribution at sea, including in areas beyond national jurisdiction. This knowledge is critical for guiding management of our ocean and contributing to achieving the targets under the Kunming-Montreal GBF, specifically for marine spatial planning (Target 1) and to effectively conserve at least 30% of the world's ocean through MPAs and other effective area-based conservation measures (Target 3). The High Seas will be an important

[4] Cury, P.M. *et al.* Global Seabird Response to Forage Fish Depletion—One-Third for the Birds.*Science***334**,1703-1706(2011).DOI:10.1126/science.1212928 ; Brooke, M. de L., 2004. The food consumption of the world's seabirds. Proc. Biol. Sci. 271, S246–S248.

[5] Graham et al. 2018 Seabirds enhance coral reef productivity and functioning in the absence of invasive rats. Nature, 559, 250-253.

contributor to achieving Target 3, but are currently poorly protected (1.5%). Addressing this gap will be possible under the BBNJ Agreement.

9. The Seabird Tracking Database currently holds more than 75 million data points from more than 180 seabird species from more than 290 contributors (https://www.seabirdtracking.org/). This powerful tool has been used to map critical sites for seabirds across the globe, including a network of marine Key Biodiversity Areas, including sites on the high seas such as the North Atlantic Current and Evlanov Sea basin (NACES) MPA. The NACES MPA was designated in 2021 by the OSPAR Convention, the Regional Seas Convention for the North-East Atlantic. Other potential High Seas MPAs have already been identified from seabird tracking data, including those recognized as KBAs and/or Ecologically or Biologically Significant Marine Areas (EBSAs) and discussions on potential submission under the new BBNJ Agreement are underway between countries, scientists, non-governmental organizations and other stakeholders. The Database will also support identifying critical sites across the six marine flyways, a pledge made by BirdLife International at the Third UN Ocean Conference.

Table 1: *Table illustrating how seabirds contribute towards the individual SDGs (with SDG 14 most likely being the one SDG that benefits most).*

Seabirds and the SDGs	
SDG	**How seabirds contribute**
SDG 2: Zero hunger	By fertilizing marine ecosystems, seabirds enhance fishery productivity and contribute to food security.
SDG 4: Quality education	Seabirds are powerful tools and champions for ocean literacy, conservation learning and citizen science.
SDG 8: Decent work & economic growth	Seabird ecotourism supports local livelihoods. Strictly regulated and sustainable harvesting practices by indigenous peoples and local communities can enhance cultural heritage.
SDG 12: Responsible Consumption and Production	As indicated under SDG 14, healthy seabird populations support fish populations. Monitoring seabird bycatch and health informs sustainable fisheries management.
SDG 13: Climate action	Seabirds act as early warning indicators of systemic change (e.g. shift in currents, fish populations) in the ocean. Indirectly seabirds support carbon sequestration through nutrient-driven phytoplankton growth and carbon transfer to the deep ocean.
SDG 14: Life below water	Seabirds regulate marine food webs, transfer biomass (thereby supporting other trophic levels from phytoplankton to fish), contribute to nutrient cycling, and serve as indicators of ocean health, thereby supporting the identification of critical sites towards achieving 30x30.

SDG 15: Life on land	Guano fertilizes island ecosystems, supporting vegetation and terrestrial ecosystem. The birds disperse seeds and microbes. On land, seabirds also act as indicators of critical sites towards achieving 30x30.
SDG 17: Partnerships for the goals	International conservation of migratory seabirds fosters cross-border cooperation.

10. Because seabirds cover vast distances on their annual migrations they connect open ocean and coastal ecosystems, polar and tropical biomes, as well as surface waters with deep ocean layers. These migratory species are mobile links between all these environments and through their ecological function make contributions across the SDGs – especially those tied to biodiversity, ocean health, food security and climate resilience.

Urgent need for action

11. Today seabirds are one of the most threatened groups of birds, with more than half of species with negative population trends. The vast ranges of seabirds, often across entire ocean basins and sometimes even circumnavigating the entire globe, mean that these birds are exposed to many threats across these vast areas. 70% of all seabird species face multiple threats[6].

12. The need for dedicated seabird conservation action has never been more urgent. The threats driving global population declines include (in order of descending magnitude) invasive species, bycatch and overfishing, climate change, hunting/trapping, disturbance, as well as energy production and mining, pollution (including light pollution) and diseases, such as avian influenza[6]. It is estimated that due to bycatch alone hundreds of thousands, and possibly more than 1 million seabirds, are killed every year[7]. Large-scale fisheries drive the declines at twice the rate compared to small-scale fisheries.

13. Because many seabirds are relatively well studied there is not only a good understanding of conservation status, but also of the effectiveness of conservation action. Numerous studies have shown the benefit of conservation interventions for seabirds on land, including eradication of invasive species at breeding colonies[8], and at-sea, including the effective implementation of bycatch mitigation measures[9] and the identification and protection of marine habitats critical for the conservation of species[10]. However, to date the scale of such interventions is insufficient to improve the conservation status of seabirds. What is urgently needed is to scale up and strengthen international cooperation at the scale of seabird migrations, by applying the marine flyways framework.

[6] Dias et al. 2019 Threats to seabirds: a global assessment. Biological Conservation 237, 525-537.
[7] Melvin, E.F., Wolfaardt, A., Crawford, R., Gilman, E. & Suazo, C.G. (2023) Chapter 17 - Bycatch reduction. In *Conservation of Marine Birds* (ed. L. Young, E. Van der Werf), pp. 457-496, Academic Press. https://doi.org/10.1016/B978-0-323-88539-3.00018-2

[8] Oliveria et al. 2022 Eradication and control of invasive mammal species as a seabird conservation tool. *Volume 1: Seabird Biodiversity and Human Activities*. CRC Press, 2022. 224-242.
[9] Da Rocha et al. 2021 Reduction in seabird mortality in Namibian fisheries following the introduction of bycatch regulation. Biological Conservation 253: 108915.
[10] E.g. Péron et al. 2013 Importance of coastal Marine Protected Areas for the conservation of pelagic seabirds: The case of Vulnerable yelkouan shearwaters in the Mediterranean Sea. Biological Conservation 168: 210-221.

14. Long term conservation efforts at a flyway scale have been shown to have positive benefits for migratory species on land[11]. Therefore, it is timely to consider how to ensure more effective knowledge transfer and to scale conservation action for seabirds across ocean basins at a flyway scale.

Geography and composition of the six marine flyways

15. The following Figure 1 outlines the geography of the six marine flyways: Atlantic Ocean Flyway (AOF), North Indian Ocean Flyway (NIOF), East Indian Ocean Flyway (EIOF), West Pacific Ocean Flyway (WPOF), Pacific Ocean Flyway (POF) and Southern Ocean Flyway (SOF). Further information on how these were mapped can be found in the original assessment by BirdLife International[1].

16. The vast majority of the marine flyways are in the High Seas and therefore are the joint responsibility of all humanity and nations. Closer to the coast the marine flyways overlap with the Exclusive Economic Zones (EEZs) of 54 countries worldwide. In addition, there are six countries that contain important colonies that feed into the AOF (Greece, Iceland (Non-Party), Netherlands, Norway, Sweden and Tunisia).

17. France is the only country overlapping with all six marine flyways (via its overseas territories). Australia also stands out as overlapping with four of the six marine flyways. New Zealand and the UK overlap with three marine flyways, and 14 further countries overlap with two marine flyways (see Table 2 for details).

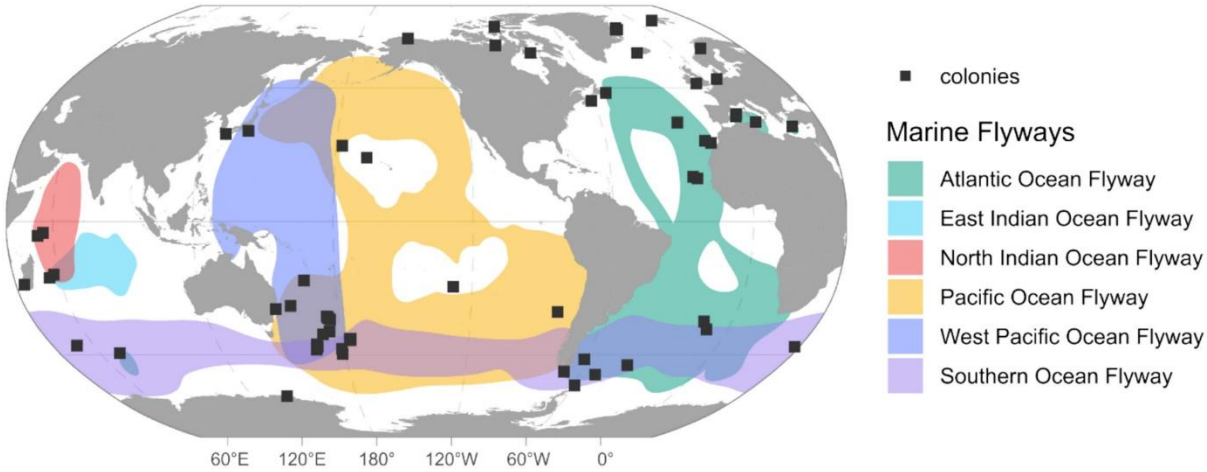

***Figure 1**: The six marine flyways identified across four ocean basins from analysis of tracking data for 48 pelagic seabird species breeding at the 64 colonies indicated by the black squares. Map shown in Robinson projection centred at 140°W.*

18. These flyways illustrate the broadscale movements of pelagic migratory seabirds, and complement the recognized terrestrial and coastal flyways systems for land- and waterbirds, which already encompass the migration routes of coastal seabirds (Figure 2). Pelagic migratory seabirds are more threatened than coastal species, demonstrating the urgent need for focused and coordinated action targeting pelagic seabirds, which the marine flyways encompass. For a full overview of the 366 seabird species, including the 214 pelagic ones to which the marine flyways apply, see Annex 1 of the COP15 Document on Seabirds and Marine Flyways (UNEP/CMS/COP15/Doc.26.3.2).

[11] Oppel et al. 2023 Long-term conservation efforts a flyway scale to halt the population decline in a globally endangered migratory raptor. Animal Conservation 27, 3: 374-385.

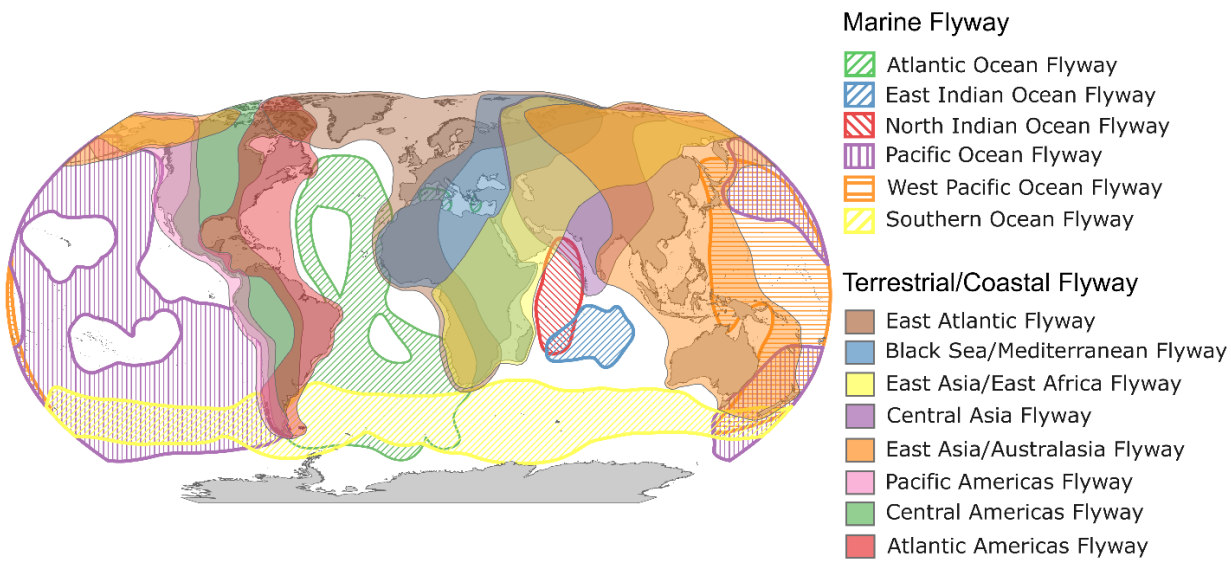

Figure 2: The same six marine flyways from Figure 1 illustrated together with the well-established terrestrial and coastal flyways.

Table 2: *List of countries overlapping with more than one marine flyway. CMS Parties are marked in bold.*

Number of Flyways	**Country**	**Marine Flyways**
6 (number of counties = 1)	**France**	AOF, EIOF, NIOF, POF, SOF, WPOF
5 (number of countries = 0)	-	-
4 (number of countries = 1)	**Australia**	EIOF, POF, SOF, WPOF
3 (number of countries = 2)	**New Zealand**	POF, SOF, WPOF
	United Kingdom	AOF, POF, SOF
2 (number of countries = 14)	**Argentina**	AOF, SOF
	Brazil	AOF, SOF
	Canada	AOF, POF
	Chile	POF, SOF
	Fiji	POF, WPOF
	Japan	POF, WPOF
	Kiribati	POF, WPOF
	Mauritius	EIOF, NIOF

	Russian Federation	POF, WPOF
	South Africa	AOF, SOF
	Tonga	POF, WPOF
	United States of America	POF, WPOF
	Uruguay	AOF, SOF
	Vanuatu	POF, WPOF

Political leverage of CMS Parties across the six marine flyways

19. The six marine flyways overlap with a total of 54 countries across 38% of all EEZs worldwide, including 35 CMS Parties (Tables 3 and 4). In addition, there is only one CMS Non-Party (Iceland), which is a Signatory to AEWA, one of the two CMS instruments covering seabirds (Table 4). All Parties to ACAP which overlap with the marine flyways are also CMS Parties. A total of 10 CMS Parties overlap with more than one flyway (Table 2).

20. When comparing the different marine flyways in terms of their overlap with CMS Parties across the EEZs, the SOF and EIOF stand out with 100% of overlapping jurisdictions with CMS Parties. The NIOF also overlaps almost completely across the EEZs with CMS Parties, except for Oman. For an overview of which countries' waters overlap with each flyway, see Table 4. Figures 3 and 4 illustrate the distribution of CMS Parties and Non-Parties overlapping with the marine flyways. Gaps in CMS Party coverage across South-East Asia, the west coast of Africa and North America are particularly prominent.

21. To date 97 seabirds are listed under CMS (with 16 under Appendix I and 75 under Appendix II, and six under Appendices I and II), and an additional 73 species are included in Resolution 14.20 as potential species for listing (see Annex 1 of UNEP/CMS/COP15/Doc.26.3.2). The Antipodean Albatross is the only seabird with a concerted action under CMS (UNEP/CMS/Concerted Action 13.12 (Rev.COP14)). The intention for the concerted action, adopted at COP13 in 2020, was to act as a catalyst for reducing the risk of bycatch to other seabird species and strengthen capacity building activities relating to seabird bycatch mitigation and data collection among CMS Parties.

22. Out of the CMS agreements, two cover seabirds: 1) ACAP focusses exclusively on albatrosses and petrels, the most threatened groups of seabirds, and 2) AEWA focusses on African-Eurasian waterbirds and covers coastal seabirds in the region (not pelagic species, which are envisaged to be covered under the marine flyways).

23. AEWA has been in force since 1999 and covers 255 waterbird species dependent on wetlands at least part of their annual cycle. The agreement currently has 85 Contracting Parties and lists a total of 84 coastal seabirds. As a result of the continuing decline in seabirds in the African-Eurasian region AEWA adopted Resolution 7.6 in 2018 on priorities for the conservation of seabirds in the African-Eurasian Flyways, which is currently being updated for the 9th Session of the Meeting of the Parties in November 2025. The intension is to list relevant waterbirds and coastal seabirds under AEWA and pelagic seabirds (globally) under CMS.

24. Since ACAP entered into force in 2004 the agreement has made tremendous progress across the southern hemisphere, with much emphasis on mitigating seabird bycatch, establishing best practices for mitigation measures for pelagic longline fisheries. Close

engagement with fisheries via the RFMOs and other organizations has been at the forefront of this agreement with 13 Parties (see Figure 5).

25. Individual CMS Parties have brought forward tremendous conservation action for seabirds, such as the UK eradicating black rats on the Shiant islands in Scotland, which has benefited Atlantic puffins, guillemots, kittiwakes and other seabirds breeding there. Australia successfully removed rabbits, mice and rats from Macquarie Island benefitting albatrosses, petrels, penguins and other seabirds. Other countries include South Africa removing cats and mice on Marion Island in the southern Indian Ocean in order to benefit the 29 seabird species breeding here, including albatrosses and petrels. Across Europe the establishment of Special Protected Areas (SPAs) under the EU Birds Directive is likely to be one of the biggest successes, with good evidence showing that management plans and active implementation (e.g. predator eradication, bycatch control) can lead to seabird population recoveries. In terms of tackling seabird bycatch, New Zealand, for example, have made 100% observer coverage on fishing vessels mandatory, coupled with best practice seabird bycatch mitigation measures (as established under ACAP) for the entire surface longline fleet at all times. Chile is another Party at the forefront of tackling seabird bycatch establishing mitigation measures for both longline and trawl fisheries in 2014-2019 and launching electronic monitoring through cameras on industrial vessels since 2020. As a result, the levels of seabird bycatch have dropped significantly.

26. By implementing the marine flyways framework and multi-species action plans there is potential to build upon these success stories and to scale action at the required level and pace in order to tackle the ongoing decline in seabird populations. The current conservation momentum seen for the High Seas at the Third UN Ocean Conference and under the new BBNJ Agreement could potentially contribute to transformative action for seabirds.

Table 3: *List of CMS Parties that overlap with one or more of the six marine flyways.*

35 CMS Parties with EEZ(s) overlapping with marine flyways		
Algeria	Guinea	Peru
Angola	Guinea-Bissau	Philippines
Argentina	India	Portugal
Australia	Ivory Coast	Samoa
Brazil	Liberia	Senegal
Chile	Madagascar	Seychelles
Denmark	Maldives	South Africa
Ecuador	Mauritania	Spain

Fiji	Mauritius	United Kingdom
France	Morocco	Uruguay
Gambia	New Zealand	Yemen
Ghana	Palau	

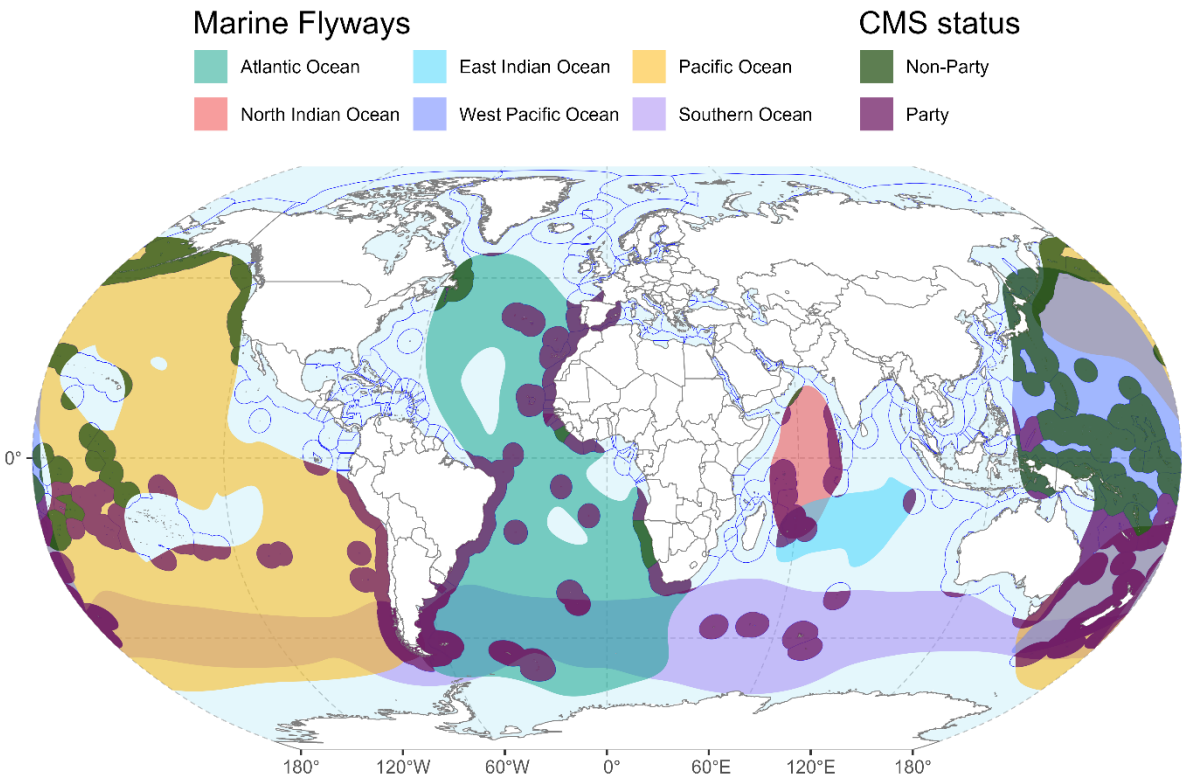

Figure 3: *Map of the six marine flyways illustrating where the national EEZs overlap (CMS Parties in purple, Non-Parties in green). See Table 3 for details on countries per flyway.*

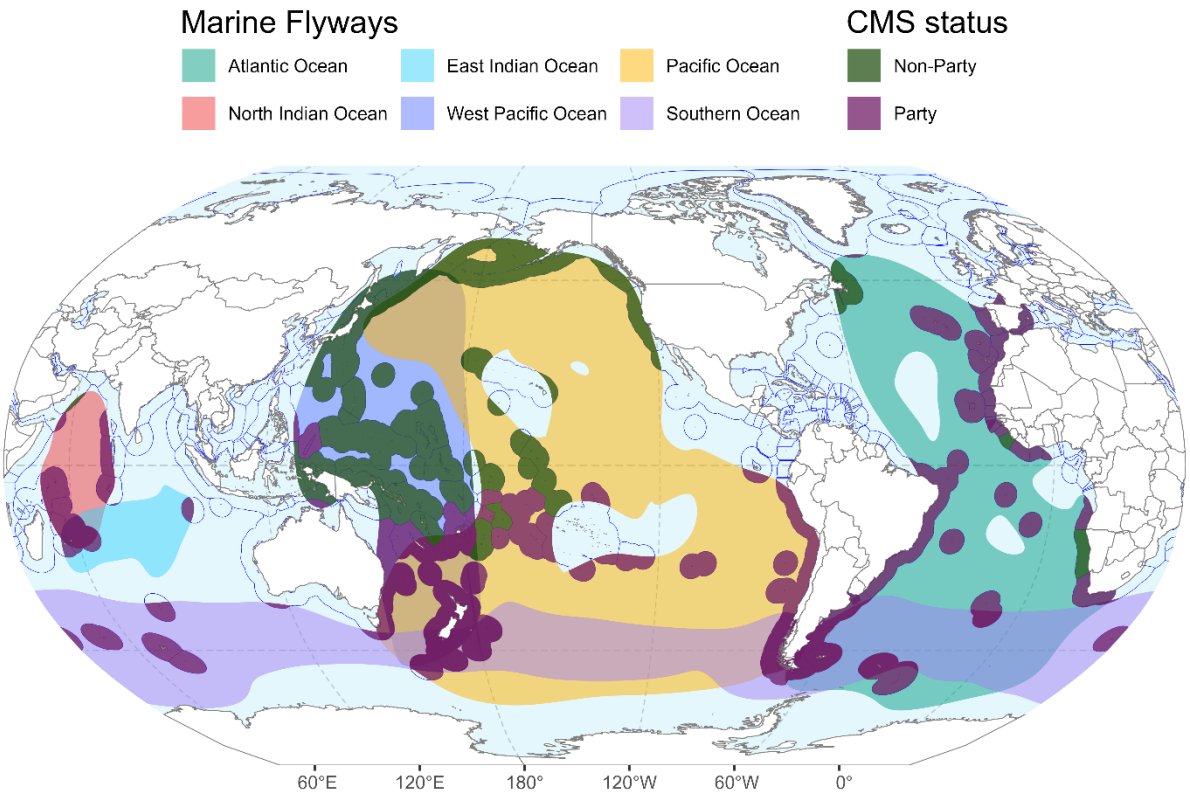

Figure 4: Same illustration as in Figure 3, but with a different projection (centered in 140°W). Map of the six marine flyways illustrating where the national EEZs overlap (CMS Parties in purple, Non-Parties in green). See Table 4 for details on countries per flyway.

Table 4: *List of countries whose EEZs overlap with the individual marine flyways. CMS Parties are indicated in bold. Those countries in brackets (e.g. Iceland) contribute to the Atlantic Flyway via important colonies)*

Marine Flyway	**N° of countries**	**Countries** (with CMS Parties in **bold**)
Atlantic Ocean Flyway (AOF)	25 + 6	**Algeria**, **Angola**, **Argentina**, **Brazil**, Canada, **Cabo Verde, Côte d'Ivoire, Denmark**, **France**, **Gambia**, **Ghana**, (**Greece**), **Guinea**, **Guinea-Bissau,** (Iceland), **Liberia**, **Mauritania**, **Morocco**, Namibia, (**Netherlands**), (**Norway**), **Portugal**, **Senegal**, Sierra Leone, **South Africa**, **Spain**, (**Sweden**), (**Tunisia**), **United Kingdom**, **Uruguay.**
East Indian Ocean Flyway (EIOF)	3	**Australia, France, Mauritius.**

North Indian Ocean Flyway (NIOF)	8	**France, India, Madagascar, Maldives,** Oman, **Mauritius, Seychelles, Yemen.**
Pacific Ocean Flyway (POF)	17	**Australia**, Canada, **Chile, Ecuador, Fiji, France,** Japan, Kiribati, Mexico, **New Zealand, Peru,** Russian Federation, **Samoa**, Tonga, **United Kingdom,** United States of America, Vanuatu.
West Pacific Ocean Flyway (WPOF)	19	**Australia, Fiji, France,** Indonesia, Japan, Kiribati, Marshall Islands, Micronesia, Nauru, **New Zealand, Palau,** Papua New Guinea, **Philippines,** Russia, Solomon Islands, Tonga, Tuvalu, United States of America, Vanuatu.
Southern Ocean Flyway (SOF)	9	**Argentina, Australia, Brazil, Chile, France, New Zealand, South Africa, United Kingdom, Uruguay.**

Existing policy frameworks relevant for marine flyways

Multilateral Environmental Agreements (MEA)

27. Amongst the biodiversity-related MEAs, the treaties that are most relevant to seabirds are the Convention on Biological Diversity (CBD), the Ramsar Convention and the new BBNJ Agreement, in addition to CMS and its two above-mentioned agreements AEWA and ACAP.

28. The CBD contributes to seabird conservation through its GBF targets, via the Programme of Work on Marine and Coastal Biodiversity, which includes EBSAs and other policies supporting mainstreaming seabird conservation across fisheries, energy, tourism and other sectors. The CBD promotes the application of KBAs to guide spatial planning and thereby also supports seabird conservation. Given that seabirds are such powerful tools to identify and map important marine areas, including the high seas, the linkage to almost all of the GBF targets is strong12.

29. The Ramsar Convention focuses on wetland conservation both inland and coastal up to a water depth of 6m in the ocean. Ramsar's List of Wetlands of International Importance (Ramsar sites) includes thousands of wetlands, estuaries, islands, lagoons and intertidal zones, which are critical for nesting, feeding and resting seabirds (such as the Wadden Sea). Other Ramsar policy streams also support seabird conservation, such as the "wise use" framework and emphasis on synergies with CMS regarding migratory species.

30. The BBNJ Agreement offers a transformative opportunity to advance seabird conservation on the High Seas. The designation of area-based management tools, including MPAs, is likely to make the biggest contribution to seabird conservation, as well as provisions for Environmental Impact Assessments and capacity building and technology transfer. Synergies with CMS and its instruments, CBD and especially the RFMOs are critical for BBNJ to be successful.

[12] https://iucn.org/sites/default/files/2024-10/correction-iucn-wcpa-technical-note-16.pdf

31. Figure 5 illustrates which countries within the marine flyways are Party to which of the above-mentioned MEAs, in the case of BBNJ, highlighting which countries have ratified to date (illustrated in bold). France, Norway, and Spain are Parties to all the illustrated MEAs and have ratified BBNJ. The above-mentioned gaps in CMS Parties across the marine flyways are well-covered by CBD and the Ramsar Convention, therefore, in order to advance this policy stream synergies are likely to be essential, especially with regards to South East Asia and North America.

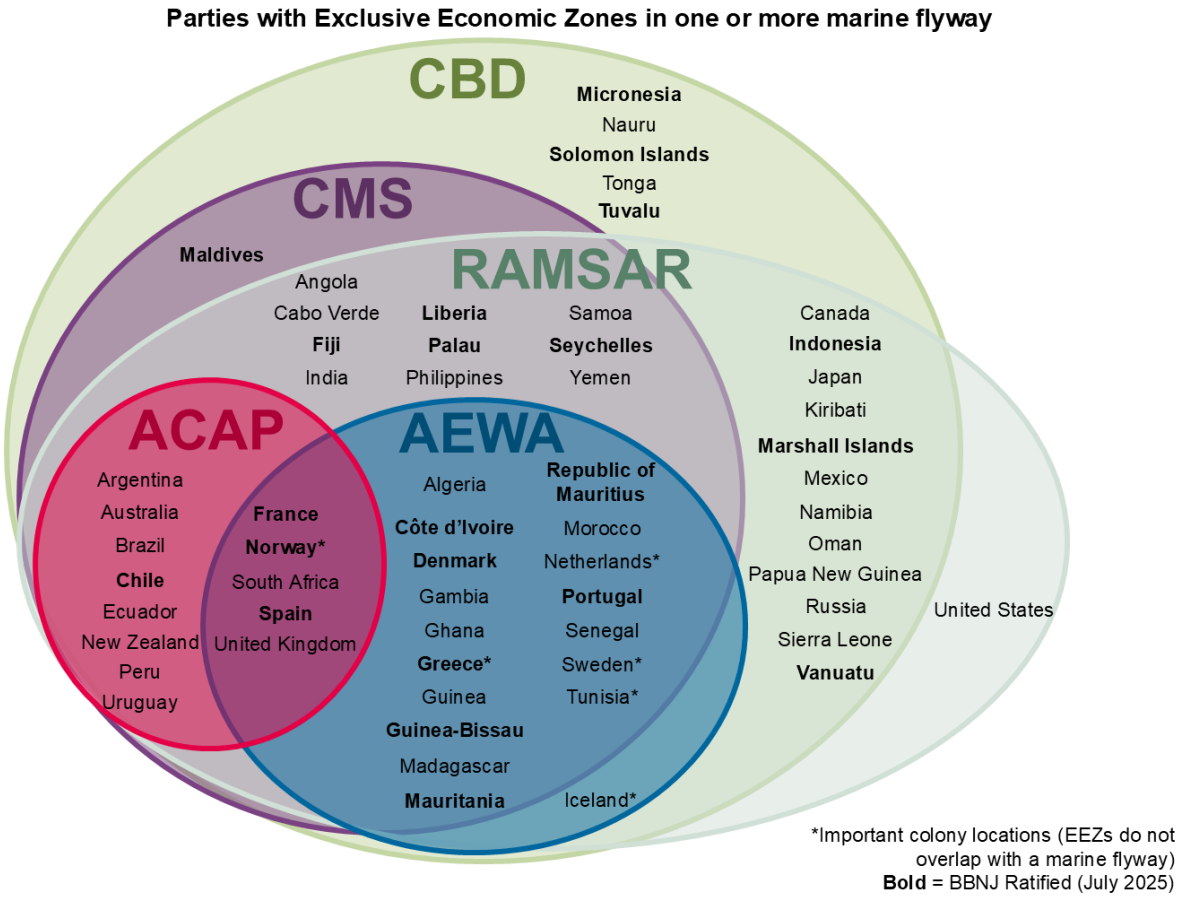

Figure 5: *Venn diagram illustrating how countries overlapping with the marine flyways in their national waters engage in relevant Multilateral Environmental Agreements. Countries that have ratified the new BBNJ Agreement are shown in bold (status July 2025). Only Parties (referred to as Contracting Parties under Ramsar) are illustrated, not range states.*

Regional Fisheries Management Organizations

32. RFMOs play a critical role in seabird conservation, especially because they regulate fishing activities across vast areas of the ocean, including parts of the High Seas, where many seabird species forage and migrate. Since bycatch and the depletion of forage fish are among the primary threats to seabirds globally, RFMO policies and enforcement mechanisms can either mitigate or exacerbate these pressures.

33. There are four mechanisms through which RFMOs primarily contribute to seabird conservation: regulation of bycatch mitigation measures, monitoring and regulating onboard observers and/or electronic monitoring systems recording bycatch incidents, management of fish stocks (the primary focus of RFMOs) and spatial management through closed areas and dynamic management zones (e.g. when bycatch is high). Collaboration with other bodies such as ACAP, CMS and national fisheries agencies is another important area.

34. Bycatch mitigation measures have been adopted by tuna RFMOs below set latitudes where there are high distributions of albatrosses and petrels. Key mitigation measures include 1) bird-scaring lines (tori lines), 2) night setting (fishing when birds are less active) and 3) weighted branch lines to sink hooks quickly. Applying all three measures is best practice recommended by ACAP, or instead to use hook-shielding devices which can replace all three. Already using two out of the three measures can be highly effective in reducing bycatch rates. Countries such as Namibia have illustrated that seabird bycatch can be reduced by over 90% when bycatch mitigation measures are used effectively.

35. Observer coverage and monitoring are crucial for seabird conservation, being advocated by both CMS and ACAP to reach 100% on industrial fishing vessels to improve accountability. Countries such as Chile and New Zealand have illustrated that this is both practically feasible and highly effective in reducing seabird bycatch.

36. Forage fish management is a key area where RFMOs can add value, as illustrated by the regulation under the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR). CCAMLR is the only RFMO to date to robustly manage forage species such as krill by applying an ecosystem-based approach that explicitly considers the feeding requirements of seabirds and marine mammals. Precautionary catch limits are set for krill and areas can be closed when predator needs are not met. Often forage fish relevant for seabirds (like squid and sardines) are caught as bait in longline fisheries, but this often falls outside current RFMO mandates.

37. The UN Fish Stocks Agreement (UNFSA[13]) already explicitly requires RFMOs and states to adopt precautionary and ecosystem-based approaches to managing fish stocks, as well as to minimize impacts on associated species, including seabirds. Given the current BBNJ momentum, there is a good opportunity for CMS Parties to leverage action for strong ecosystem-based fisheries management and thereby contribute to the overarching global goal of biodiversity conservation in the High Seas. Building on the synergies emphasized here, it will be critical to emphasize the need to manage fisheries with seabirds and other threatened species included in management considerations. CMS Parties are well-represented within both the tuna and non-tuna RFMOs, notably those within the European Union (see Annexes). Given the current momentum under BBNJ, there is potential to strengthen the application of the above-mentioned mechanisms, building on closer cooperation between environmental and fisheries authorities at the national level.

Regional Seas Conventions

38. The Regional Seas Conventions (RSCs), such as the OSPAR Convention and the SPREP/Noumea Convention, play a valuable and growing role in seabird conservation. Where the mandate exists for these conventions to establish MPAs, this has been a critical tool to strengthen seabird protection. The NACES High Seas MPA under the OSPAR Convention, for example, is the size of France and makes a key contribution to strengthen the Atlantic Ocean Flyway[14]. Where these exist, Species and Habitat Action Plans can also break down and strengthen specific management actions, such as under the Regional Action Plan for Marine Birds in the North-East Atlantic 2024-2030 (RAP-BIRD) under the OSPAR Convention.

[13] Full name: Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea (UNCLOS) relating to the Conservation and Management of Straddling Fish Stocks and High Migratory Fish Stocks

[14] https://cdn.sanity.io/files/6ibvd6r4/production/143103c669739d7da8d06a946a2b93107c0c6e53.pdf/NACES%20MPA%20brief.pdf

39. Other key mechanisms that contribute are the assessments conducted by the conventions, such as the HOLAS assessments under the Baltic Marine Environment Protection Commission (HELCOM), since these highlight population declines, bycatch hotspots and pressures such as pollution. RSCs can also address major threats such as oil spills and marine litter. Increasingly RSCs have engaged in marine spatial planning efforts showcasing seabird migration corridors and avoidance zones (e.g. for offshore wind) and establishing best practice, for example, through the HELCOM-VASAB Guideline for the implementation of ecosystem-based approach in Marine Spatial Planning in the Baltic Sea area. However, as Figure 6 illustrates, only a few of the RSCs cover the High Seas and there are currently big gaps, which the BBNJ Agreement is mandated to fill.

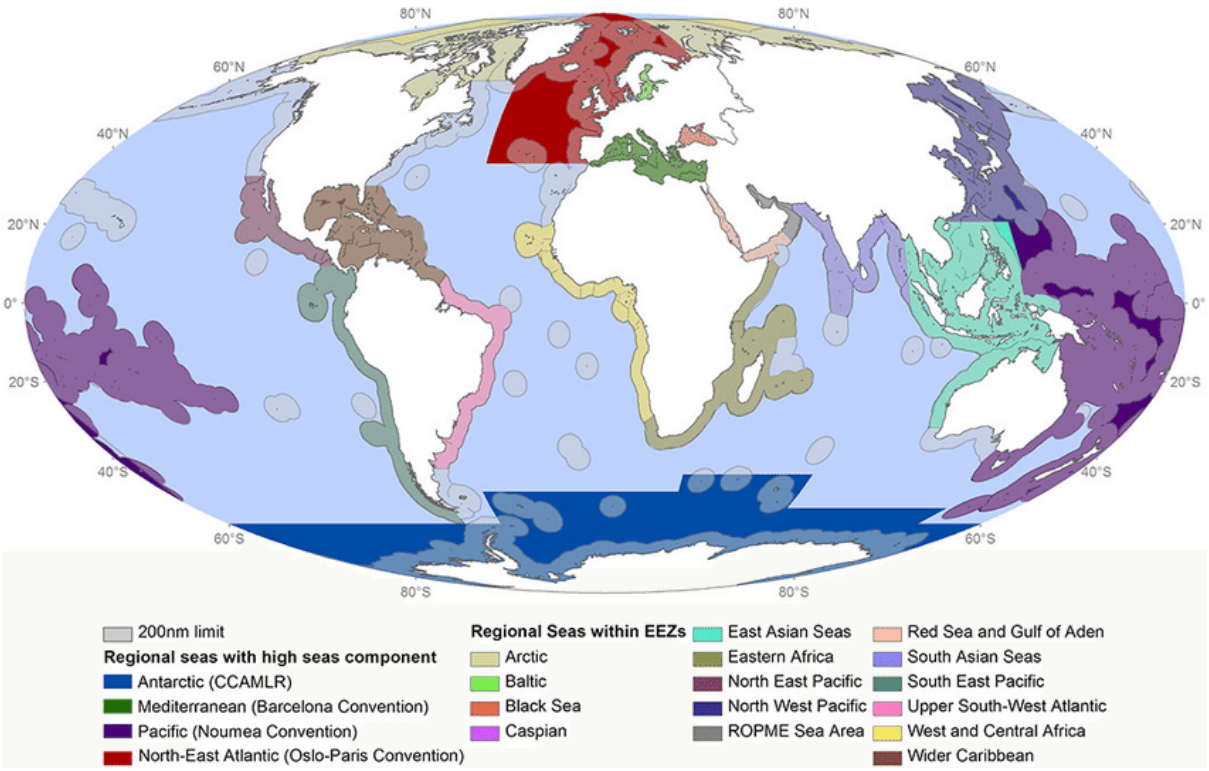

Figure 6: *Regional Seas Conventions and Action Plans, with and without a mandate for protecting areas beyond national jurisdiction (Source: Ban et al. 2013 Systematic conservation planning: a better recipe for managing the high seas for biological diversity conservation and sustainable use. Conservation Letters 7:1-41.).*

Other relevant instruments

40. Ocean governance has evolved over hundreds of years and is inherently complex. Hence there are many other instruments that are potentially relevant to the marine flyways. The International Maritime Organization (IMO) is certainly a major instrument that impacts the marine flyways indirectly by regulating global shipping. Shipping can on the one hand, especially at high-speed and in sensitive areas, cause disturbance to seabirds, but also cause pollution both due to daily operation and shipping accidents (e.g. oil, marine litter, but also light pollution).

41. Through the following mechanisms IMO contributes to seabird conservation in the marine flyways: prevention of oil and marine litter pollution (MARPOL Convention and Annexes), spatial management (for example, through Particularly Sensitive Sea Areas, PSSAs) and routing measures. Many of the regulations for the current list of PSSAs

(including the Galapagos and the Wadden Sea) are not effective for seabird conservation and need strengthening and there is much potential to also regulate vessel speed, as well as light and noise pollution in the ocean via IMO15. Closer dialogue between CMS, its instruments, and IMO is needed to make progress here.

Conclusions

42. The recognition of six marine flyways marks a pivotal moment in global efforts to conserve migratory seabirds and safeguard ocean health. Seabirds are not only iconic representatives of ocean biodiversity - they are also critical indicators of marine ecosystem integrity, linking distant regions and providing key ecosystem services such as nutrient cycling, carbon transfer, and habitat connectivity across ocean basins. Seabirds also have a rich cultural heritage, which needs to be preserved.

43. Yet, seabirds are the most threatened group of birds globally, with over half of all species in decline. The threats they face—from invasive species to bycatch and prey depletion to pollution—are growing in intensity and geographic scale. Despite the vital ecological roles seabirds play and their transboundary movements across vast marine spaces, significant policy gaps remain within CMS, as well as AEWA, ACAP, and other relevant instruments.

44. The time to act is now. Recognition of the marine flyways as a policy framework will catalyse coordinated action, unlock synergies, and elevate the conservation of seabirds and marine biodiversity to the scale that ocean health demands. The high-level recommendations outlined at the beginning of the document present a strategic path forward - ranging from collaborative governance frameworks and urgent situation analyses, to targeted action on fisheries management, habitat protection, plastic pollution, and capacity building.

45. By establishing marine flyways under CMS, Parties have the opportunity to:
    - Tackle the root causes of seabird mortality on land and at sea;
    - Contribute meaningfully to the SDGs (particularly SDGs 2, 13, 14, and 15);
    - Contribute to the implementation of targets 1, 2, 3, 4, and 10 under the Kunming-Montreal GBF, and also support targets 5 and 9 (harvesting wild species), target 7 (reducing pollution levels) and target 11 (priority areas for maintenance or restoration);
    - Support implementation of the BBNJ Agreement, notably Part III on area-based management tools, including MPAs and other means of management such as seasonal closures in the High Seas;

46. Decisive and immediate action is required to safeguard not only seabird species, but also the vital ecological functions they provide to our ocean and planet. Given the long-term experience of CMS in flyways conservation, the treaty is uniquely positioned to lead this effort - to give seabirds, and the marine flyways they depend on, the full protection they urgently require.

15 https://www.doc.govt.nz/our-work/conservation-services-programme/csp-reports/202223-csp-reports/light-mitigation-reducing-vessel-interactions-with-seabirds/

ANNEX

MEMBERSHIP STATUS WITHIN THE TUNA AND NON-TUNA RFMOS OF THE 54 COUNTRIES WITH EEZS IN THE MARINE FLYWAYS

Annex 1: *The membership status to select tuna RFMOs of those 54 countries (including both CMS Parties and Non-Parties) with EEZs (including overseas territories and regions) that overlap with the Marine Flyways, plus six further countries with important colonies that feed into the Atlantic Ocean Flyway (indicated with *). Key: X = member, x = member as an EU State, C NCP = Cooperating Non-Contracting Party, C NM = Cooperating Non-Member.*

Country	CCSBT	IATTC	ICCAT	IOTC	WCPFC
MEMBER OF 0 TUNA RFMO					
Argentina					
Chile		C NCP			
Gambia					
Guinea-Bissau					
MEMBER OF 1 TUNA RFMOs					
Algeria			X		
Angola			X		
Brazil			X		
Cabo Verde			X		
Ecuador		X			C NM
Fiji					X
Ghana			X		
Guinea			X		
Iceland*			X		
India				X	
Côte d'Ivoire			X		
Liberia		C NCP	X	C NCP	C NM
Madagascar				X	
Maldives				X	

Country	CCSBT	IATTC	ICCAT	IOTC	WCPFC
Marshall Islands					X
Mauritania			X		
Micronesia					X
Morocco			X		
Namibia			X		
Nauru					X
Norway*			X		
Oman				X	
Palau					X
Papua New Guinea					X
Peru		X			
Mauritius				X	
Russian Federation			X		
Samoa					X
Senegal			X		
Seychelles				X	
Sierra Leone			X		
Solomon Islands					X
Tonga					X
Tunisia*			X		
Tuvalu					X
Uruguay			X		
Yemen				X	
MEMBER OF 2 TUNA RFMOs					
Kiribati		X			X
Mexico		X	X		
New Zealand	X				X

Country	CCSBT	IATTC	ICCAT	IOTC	WCPFC
United Kingdom			X	X	
MEMBER OF 3 TUNA RFMOs					
Australia	X			X	X
Canada		X	X		X
Indonesia	X	C NCP		X	X
Philippines	C NM		X	X	X
South Africa	X		X	X	
United States of America		X	X		X
Vanuatu		X	X		X
MEMBER OF 5 TUNA RFMOs					
Denmark	*x*	*x*	*x*	*x*	*x*
France	*x*	X + *x*	X + *x*	X + *x*	X + *x*
Greece*	*x*	*x*	*x*	*x*	*x*
Japan	X	X	X	X	X
Netherlands*	*x*	*x*	*x*	*x*	*x*
Portugal	*x*	*x*	*x*	*x*	*x*
Spain	*x*	*x*	*x*	*x*	*x*
Sweden*	*x*	*x*	*x*	*x*	*x*

Annex 2: *The membership status to select non-tuna RFMOs of those 54 countries (including both CMS Parties and Non-Parties) with EEZs (including overseas territories and regions) that overlap with the Marine Flyways, plus six further countries with important colonies that feed into the Atlantic Ocean Flyway (indicated with *). Key: X = member, x = member as an EU State, AS = Acceding State, S = Signatory, S (nr) = Signatory (not ratified), C NCP = Cooperating Non-Contracting Party.*

Country	CCAMLR	CECAF	GFCM	NAFO	NEAFC	NPFC	SEAFO	SIOFA	SPRFMO	WECAFC
MEMBER OF 0 NON-TUNA RFMOS										
Fiji										
Indonesia										
Kiribati										
Madagascar								S		
Maldives										
Marshall Islands										
Micronesia										
Nauru										
Oman										
Palau										
Papua New Guinea										
Philippines										
Samoa										
Solomon Islands										
Tonga										
Tuvalu										
Yemen										
MEMBER OF 1 NON-TUNA RFMO										
Algeria			X							
Argentina	X									
Cabo Verde		X								
Gambia		X								
Ghana		X								

Country	CCAMLR	CECAF	GFCM	NAFO	NEAFC	NPFC	SEAFO	SIOFA	SPRFMO	WECAFC
Guinea-Bissau		X								
India	X									
Côte d'Ivoire		X								
Liberia		X								
Mauritania		X								
Mauritius	AS							X		
Mexico										X
Peru	AS								X	
Senegal		X								
Seychelles								X		
Sierra Leone		X								
Tunisia*			X							
Uruguay	X									
MEMBER OF 2 NON-TUNA RFMOS										
Angola		X					X			
Brazil	X									X
Canada	AS			X	C NCP	X				
Chile	X								X	
Ecuador	X								X	
Guinea		X								X
Iceland*				X	X					
Morocco		X	X							
Namibia	X						X			
New Zealand	X				C NCP			S (nr)	X	
South Africa	X						X			
Vanuatu	AS					X			X	

Country	CCAMLR	CECAF	GFCM	NAFO	NEAFC	NPFC	SEAFO	SIOFA	SPRFMO	WECAFC
MEMBER OF 3 NON-TUNA RFMOS										
Australia	X							X	X	
MEMBER OF 4 NON-TUNA RFMOs										
Norway*	X	X		X	X					
United Kingdom	X			X	X					X
MEMBER OF 5 - 9 NON-TUNA RFMOs										
Japan	X	X	X	X		X	X	X		X
Russian Federation	X			X	X	X			X	
United States	X	X		X		X			X	X
MEMBER OF 10 NON-TUNA RFMOs										
Denmark	*X*	*x*	*x*	X	X	*x*	*x*	*x*	X	*x*
France	X	X	X	X	*x*	*x*	*x*	X	*x*	X
Greece*	AS + *x*	X	X	*x*	*x*	*x*	*x*	*x*	*x*	*x*
Netherlands*	X	X	*x*	*x*	*x*	*x*	*x*	*x*	*x*	X
Portugal	*x*	*x*	*x*	*x*	*x*	*x*	*x*	*x*	*x*	*x*
Spain	X	X	X	*x*	*x*	*x*	*x*	*x*	*x*	X
Sweden*	X	*x*	*x*	*x*	*x*	*x*	*x*	*x*	*x*	*x*