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## THE CONVENTION ON MIGRATORY SPECIES AT 45: A “SLEEPING” TREATY AWAKES

CHRIS WOLD\*

*Migratory species—traversing multiple political jurisdictions and hundreds, if not thousands, of miles—rely on a variety of habitats for feeding, breeding, and resting during their life cycles. This makes them particularly vulnerable to what has been described as the triple planetary crisis of climate change, biodiversity loss, and pollution. The Convention on the Conservation of Migratory Species of Wild Animals (CMS) is designed to address these types of threats to endangered migratory species, as well as to those migratory species with an unfavourable conservation status or which would benefit from international cooperation. CMS was once described as a “sleeping” treaty plagued by inadequate funding and a small membership, leading to insufficient progress towards conserving migratory species. Since then, CMS has become engaged in real, on-the-ground conservation of migratory species. The CMS parties have adopted numerous resolutions to implement the requirements of CMS Article III(4) to conserve and restore habitats, remove obstacles to migration, and prevent and control factors that may endanger Appendix I species. These resolutions address a full range of threats to migratory species, including vessel strikes, powerlines, pollution, habitat loss, and many other threats. The parties are implementing numerous action plans for individual species and groups of species. They have adopted a National Legislation Programme to strengthen implementing legislation applicable to endangered migratory species included in Appendix I and a compliance mechanism to address failures to implement the requirements of CMS. CMS is now fully awake. Yet, CMS still faces significant funding challenges and would benefit from a larger membership. If the parties wish CMS to remain not only awake, but also relevant, they must be willing to provide the funds necessary to achieve the Convention’s fundamental goal:*

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\* Professor of Law, Lewis & Clark Law School. The author has served as a consultant legal advisor to the CMS Secretariat at its meetings of the Conference of the Parties in 2014, 2017, 2000, and 2024. He thanks Amy Frankel, CMS Executive Secretary, as well as the following members of the CMS Secretariat: Nikola Besek, Melanie Virtue, María José Ortiz, Andrea Pauly, Dagmar Zikova, Clara Nobbe, Lauren Lopes, Umberto Gallo Orsi, Heidrun Frisch-Nwakanma, and Tilman Schneider. Their valuable comments have made this article significantly better. I am also thankful to the dedicated editors and staff of the law review for their diligence and professionalism. Lastly, I am extremely grateful to the staff at the IUCN Environmental Law Center who gave me access to their library to photocopy documents relating to the CMS negotiation history. These negotiating documents can now be found on a website hosted by the Boley Law Library of Lewis & Clark Law School, <https://lawlib.lclark.edu/cms> [<https://perma.cc/LR37-GMNR>].

*to maintain or restore populations of listed species to a "favourable conservation status."*

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## INTRODUCTION

Migratory species perform many crucial ecological, economic, and cultural functions by dispersing seeds and pollinating plants, providing food, and contributing "to resource fluxes, biomass transfer, nutrient transport, predator-prey interactions and food-web

structure within and among ecosystems . . . .”<sup>1</sup> Yet, many are experiencing significant declines.<sup>2</sup> Migratory species—traversing multiple political jurisdictions and hundreds, if not thousands, of miles—rely on a variety of habitats for feeding, breeding, and resting during their life cycles.<sup>3</sup> This makes them particularly vulnerable to what has been described as the triple planetary crisis of climate change, biodiversity loss, and pollution.<sup>4</sup> Between 1970 and 2017, the overall decline in abundance for nearly 16,000 populations of 1,710 migratory species averaged 15%.<sup>5</sup> For the 2,300 migratory species assessed by the International Union for Conservation of Nature (IUCN) and included in its *Red List of Threatened Species*, 65% (1,498 species) are threatened by overexploitation for food and other purposes, 65% (1,494 species) are threatened by habitat loss and degradation, 42% (968 species) by pollution, and 29% (666 species) by climate change.<sup>6</sup>

The Convention on the Conservation of Migratory Species of Wild Animals (CMS or the Convention<sup>7</sup>) is designed to address

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<sup>1</sup> Claire Runge et al., *Protected Areas and Global Conservation of Migratory Birds*, 350 SCIENCE 1255, 1255 (2015); see FRANCES DAVIS ET AL., UNITED NATIONS ENVIRONMENT PROGRAMME WORLD CONSERVATION MONITORING CENTER (UNEP-WCMC), STATE OF THE WORLD’S MIGRATORY SPECIES 6 (2024).

<sup>2</sup> DAVIS ET AL., *supra* note 1, at 9.

<sup>3</sup> See Richard Schuster et al., *Optimizing the Conservation of Migratory Species over Their Full Annual Cycle*, 10 NATURE COMMUNICATIONS, Apr. 15, 2019, at 1, 2.

<sup>4</sup> *What is the Triple Planetary Crisis?*, UNITED NATIONS CLIMATE CHANGE: NEWS (Apr. 13, 2022), <https://unfccc.int/news/what-is-the-triple-planetary-crisis> [<https://perma.cc/Q8S7-LX9P>].

<sup>5</sup> DAVIS ET AL., *supra* note 1, at 16 (summarizing information from the Living Planet Index for Migratory Species).

<sup>6</sup> *Id.* at 26–27 (noting also that more than one threat may affect the same species).

<sup>7</sup> Convention on the Conservation of Migratory Species of Wild Animals, June 23, 1979, 1651 U.N.T.S. 333 (entered into force Nov. 1, 1983), <http://www.cms.int/en/convention-text> [<https://perma.cc/J77U-KD66>] [hereinafter CMS]. For a time, authors referred to CMS as the “Bonn Convention” because that is where negotiators adopted the Convention’s final text. Today, it is rarely referred to by that name. CMS is a United Nations Environment Programme (“UNEP”) agreement. While UNEP hires the Executive Secretary, it does not otherwise play a role in decision making under the CMS and is not the authoring

these types of threats to endangered migratory species, as well as those migratory species with an unfavourable conservation status or which would benefit from international cooperation.<sup>8</sup> The Convention's fundamental goal is to ensure that listed species are maintained at or restored to a "favourable conservation status."<sup>9</sup> To achieve that goal, the CMS parties, currently numbering 133, have direct obligations to prohibit the "taking" of endangered migratory species listed in Appendix I, protect and restore their habitats, address obstacles to migration, and control other factors endangering or likely to endanger them.<sup>10</sup> In addition, they must endeavor to create additional legal instruments to protect those migratory species with an unfavourable conservation status and that that benefit from international cooperation, provided they are included in Appendix II.<sup>11</sup>

CMS was once described as a "sleeping" treaty plagued by inadequate funding and a small membership, leading to insufficient progress towards conserving migratory species and with no means to compel compliance.<sup>12</sup> In 1989, just six years after CMS entered into force in 1983, Simon Lyster wrote that CMS "has been of little value so far to migratory species conservation, and there is not much

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organization of the resolutions or other documents of the convention. "CMS" refers to the treaty itself and as author of documents and resolutions of the CMS parties.

<sup>8</sup> See *id.* at arts. II–III, & IV.

<sup>9</sup> *Id.*

<sup>10</sup> CMS, *supra* note 7, art. III, ¶¶ 4, 5; *infra* Part II.A.1 (discussing the "take" prohibition).

<sup>11</sup> See *id.* art. IV; *infra* Part II.C (discussing the duty to conclude Agreements for Appendix II species). The complete definition of an Appendix II species is as follows:

Appendix II shall list migratory species which have an unfavourable conservation status and which require international agreements for their conservation and management, as well as those which have a conservation status which would significantly benefit from the international cooperation that could be achieved by an international agreement.

CMS, *supra* note 7, art. IV, ¶ 1.

<sup>12</sup> SIMON LYSTER, INTERNATIONAL WILDLIFE LAW 301 (1985).

prospect of it becoming of significant value in the near future.”<sup>13</sup> In 2001, now eighteen years into the life of CMS, Douglas Hykle wrote that CMS “is a convention that has yet to realise its full potential” due to low membership (seventy-nine parties at that time) and a failure to mainstream conservation within governmental agencies with oversight over migratory species.<sup>14</sup> In 2005, Richard Caddell voiced some optimism that CMS may fulfill its conservation potential but that the Convention was “only now beginning to stir.”<sup>15</sup> Even in 2021, others declared that “[t]he potential of . . . CMS for comprehensive protection of migratory species is far from fully realized,” although it “seems at least to be pointing in the right direction.”<sup>16</sup>

CMS has awakened. The Convention has active and significant programs organized around taxonomic groups—Aquatic Species, Avian Species, and Terrestrial Species—and cross-cutting issues affecting all taxonomic groups.<sup>17</sup> In addition to addressing individual or groups of species within a specific region,<sup>18</sup> the parties have adopted resolutions addressing specific habitats<sup>19</sup> and specific

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<sup>13</sup> Simon Lyster, *The Convention on the Conservation of Migratory Species of Wild Animals (The Bonn Convention)*, 29 NAT. RES. J. 979, 1000 (1989) [hereinafter Lyster, *The “Bonn Convention”*].

<sup>14</sup> Douglas Hykle, *The Convention on Migratory Species and Other International Instruments Relevant to Marine Turtle Conservation: Pros and Cons*, 5 J. INT’L WILDLIFE L. & POL’Y 105, 109 (2002).

<sup>15</sup> Richard Caddell, *International Law and the Protection of Migratory Wildlife: An Appraisal of Twenty-Five Years of the Bonn Convention*, 16 COLO. ENV’T L. J. 113, 155–56 (2005).

<sup>16</sup> ALAN BOYLE & CATHERINE REDGWELL, BIRNIE, BOYLE, AND REDGWELL’S INTERNATIONAL LAW AND THE ENVIRONMENT 658, 660 (4th ed. 2021).

<sup>17</sup> See *Secretariat Staff*, CMS, <https://www.cms.int/en/convention-bodies/secretariat/staff> [<https://perma.cc/J77U-KD66>] (last visited Oct. 11, 2025) (a review of the resolutions adopted by the parties shows the depth of each of these program areas). See also *Resolutions of the CMS Conference of the Parties (COP) in Effect*, CMS, <https://www.cms.int/en/documents/cop-resolutions> [<https://perma.cc/79P4-KBD6>] (last visited Oct. 11, 2025).

<sup>18</sup> See, e.g., CMS, *Conservation and Management of Whales and Their Habitats in the South Atlantic Region*, UNEP/CMS/Res. 12.17 (2017); CMS, *Conservation of African-Eurasian Vultures*, UNEP/CMS/Res. 12.10 (Rev. COP14) (2024); CMS, *Central Asian Mammals Initiative*, UNEP/CMS/Res. 11.24 (Rev. COP13) (2020).

<sup>19</sup> See, e.g., CMS, *Conservation and Management of Seagrass Ecosystems*, UNEP/CMS/Res. 14.8 (2024).

threats common to much larger groups of species, such as illegal take and trade,<sup>20</sup> bycatch,<sup>21</sup> power lines,<sup>22</sup> wildlife disease,<sup>23</sup> and migration itself.<sup>24</sup> The parties have concluded twenty-six free-standing legal instruments known as Agreements to conserve and manage Appendix II species,<sup>25</sup> with most of these Agreements including action plans directing Agreement participants to perform specific scientific research, habitat protection, and other activities to improve the conservation status of those species.<sup>26</sup> The parties have taken a flexible approach to developing legal instruments to protect Appendix II species, including binding international treaties and non-binding Memoranda of Understanding, as well as less formal action plans and “concerted actions”—timebound actions to achieve concrete conservation priorities that may also result in the development of an action plan or more formal legal instrument.<sup>27</sup> While many—and perhaps most—CMS-listed species would benefit from such actions, those initiatives now in existence have resulted in on-the-ground conservation successes.<sup>28</sup> In addition, the parties have adopted the National Legislation Programme to review each party’s implementing legislation and developed a series of documents

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<sup>20</sup> See, e.g., CMS, *The Prevention of Illegal Killing, Taking and Trade of Migratory Birds*, UNEP/CMS/Res. 11.16 (Rev. COP14) (2024); CMS, *Aquatic Wild Meat*, UNEP/CMS/Res. 12.15, pmb. ¶ 1, 2 (2017).

<sup>21</sup> CMS, *Bycatch*, UNEP/CMS/Res. 12.22 (2017).

<sup>22</sup> See, e.g., CMS, *Power Lines and Migratory Species*, UNEP/CMS/Res. 10.11 (Rev. COP13) (2020).

<sup>23</sup> See, e.g., CMS, *Wildlife Health and Migratory Species*, UNEP/CMS/Res. 12.6 (Rev. COP14) (2024); CMS, *Avian Influenza*, UNEP/CMS/Res. 14.18 (2024).

<sup>24</sup> See, e.g., CMS, *Ecological Connectivity*, UNEP/CMS/Res. 14.16 (2024); CMS, *Flyways*, UNEP/CMS/Res. 12.11 (Rev. COP14) (2024).

<sup>25</sup> See *infra* Part II.C.3.

<sup>26</sup> See *infra* Part II.C.4.

<sup>27</sup> The resolution on concerted actions does not expressly state that actions must be timebound. However, the resolution does call for their review at each meeting of the COP, thus implicitly including a deadline for completion of activities that are part of a concerted action. See CMS, *Concerted Actions*, UNEP/CMS/Res. 12.28 (Rev. COP14), ¶¶ 3–5 (2020); *id.* at Annex 1, ¶ 6; *infra* Part III.C.3–5 (discussing various CMS instruments for conservation and management of migratory species, including concerted actions).

<sup>28</sup> See *infra* Part II.C.4.

describing best practices for implementing treaty obligations.<sup>29</sup> They have also adopted the Review Mechanism to assess compliance with the obligations relating to Appendix I species.<sup>30</sup> Together, these two programs are incentivizing implementation and compliance with the Convention.<sup>31</sup>

Even if CMS is awake, its potential to protect and restore populations of migratory species is undermined by inadequate funding, as has been the case throughout most of its 40-year history.<sup>32</sup> The drafters of CMS envisaged free-standing Agreements for all Appendix II species<sup>33</sup> and the current CMS strategic plan for 2024–2032 calls for new Agreements, action plans, or concerted actions for all Appendix II species with an unfavourable conservation status.<sup>34</sup> And, while participation in CMS continues to grow, it is still missing roughly two-thirds of terrestrial Earth, with Canada, China, Russia, and the United States remaining non-parties.<sup>35</sup> Moreover, for all of CMS’s achievements, Agreements, and action plans, many may be undone by overexploitation,<sup>36</sup> habitat loss or fragmentation,<sup>37</sup> and climate change,<sup>38</sup> among other threats. If the parties wish to ensure that CMS remains not only awake, but also relevant, they must be willing to provide the funds necessary to achieve the Convention’s fundamental goal: to ensure that listed species are maintained at or restored to a “favourable conservation status.”<sup>39</sup>

This article reviews the history of CMS—including its negotiating history—to assess the success of the parties in fulfilling the

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<sup>29</sup> See *infra* Part II.D (discussing the National Legislation Programme).

<sup>30</sup> See *id.* (discussing the Review Mechanism).

<sup>31</sup> See *id.*

<sup>32</sup> See *infra* Part III.C.

<sup>33</sup> See *infra* Part II.C.2.

<sup>34</sup> CMS, *Samarkand Strategic Plan for Migratory Species 2024–2032*, UNEP/CMS/Res. 14.1, 4 (2024).

<sup>35</sup> See *infra* Part III.A.

<sup>36</sup> See DAVIS ET AL., *supra* note 1, at 26 (stating that 7 of 10 CMS-listed species are affected by overexploitation).

<sup>37</sup> See *id.* (stating that 3 of 4 CMS-listed species are affected by habitat loss, degradation, and fragmentation).

<sup>38</sup> See *infra* Part III.B.

<sup>39</sup> CMS, *supra* note 7, art. II–IV.

Convention's ambitions. Part II introduces the main elements of CMS. Part III comprehensively reviews the strategies that CMS has deployed to conserve and manage migratory species, including the "take" prohibition and the growth of species- and taxon-specific Agreements and action plans that commit participating Range States to perform scientific research, protect and restore habitat, and adopt other measures to conserve and manage migratory species. Part IV acknowledges that, despite its significant achievements, CMS still has a number of challenges and obstacles to further success, most importantly, the failure of parties to provide adequate funding and large geographic gaps in CMS membership. Part V concludes that CMS is well into a productive period and its value is increasingly recognized, raising hope that it will attract a commensurate level of support. Nevertheless, its successes are threatened by a failure of the parties to meet the Convention's—and the drafters'—ambitions.

### I. INTRODUCING CMS

CMS's origins date to the 1972 Stockholm Action Plan for the Environment, in which States "recommended that Governments give attention to the need to enact international conventions and treaties to protect species inhabiting international waters or those which migrate from one country to another."<sup>40</sup> This recommendation arose out of "the realisation that failure to protect a migratory species throughout every stage of migration could severely damage efforts to maintain or restore its population."<sup>41</sup> The Federal Republic of Germany (West Germany) agreed to spearhead the preparation of a convention to protect migratory species and asked the Environmental Law Centre of the International Union for the Conservation of Nature and Natural Resources (IUCN) to draft it.<sup>42</sup> After many

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<sup>40</sup> United Nations Conference on the Human Environment, *Report of the United Nations Conference on the Human Environment*, U.N. Doc. A/CONF.48/14/Rev.1, Recommendation 32 at 12 (June 5–16, 1972) [hereinafter Stockholm Action Plan].

<sup>41</sup> MICHAEL BOWMAN, PETER DAVIES & CATHERINE REDGWELL, *LYSTER'S INTERNATIONAL WILDLIFE LAW* 535 (2nd ed. 2010).

<sup>42</sup> See International Union for Conservation of Nature and Natural Resources, *Explanatory Notes on Draft P.4 (August 1974) of Proposed Convention on the Conservation of Migratory Species of Wild Fauna*, at 1 (Aug. 12, 1974) [hereinafter Draft P.4].

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internal IUCN drafts and two drafts submitted to governments by the Federal Republic of Germany, the negotiating parties met in Bonn in June 1979 and adopted the Convention's final text.<sup>43</sup>

As the discussions in Sections III and IV elaborate, the early drafts included a very restrictive prohibition against taking with few exceptions and an initial desire to draft more specific agreements for *all* migratory species tailored to their conservation needs. Over the course of the negotiations, however, the take prohibition remained restrictive but additional exceptions were introduced. In addition, even as negotiators agreed that adopting species-specific agreements was overly ambitious, they also opened up CMS to adopt agreements that covered species not included in the CMS Appendices.

#### A. "Migratory Species"

The Convention adopted by the negotiating governments on June 23, 1979, establishes two appendices of protected migratory species, but it imposes very different obligations on Range States depending on whether a species is included in Appendix I or II. As an initial matter, any species included in the appendices must be a "migratory species," which CMS defines as "the entire population or any geographically separate part of the population of any species or lower taxon of wild animals, a significant proportion of whose members cyclically and predictably cross one or more national jurisdictional boundaries."<sup>44</sup>

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<sup>43</sup> The Federal Republic of Germany submitted the IUCN's "P.4" draft of August 1974 to relevant stakeholders as an unofficial draft. The first official draft was submitted to an expert group convened to discuss it in July 1976. After receiving comments on that draft, the Federal Republic of Germany submitted for comment a Revised Draft Convention on the Conservation of Migratory Species of Animals, dated August 5, 1977. *See* Revised Draft Convention on the Conservation of Migratory Species of Wild Animals, arts. III, IV (Aug. 5, 1977) [hereinafter First Revised Draft Convention]. It submitted a Second Revised Draft Convention on the Conservation of Migratory Species of Animals, dated December 1978, to stakeholders. This draft became the basis of the June 1979 negotiations in Bonn. *See* Second Revised Draft Convention on the Conservation of Migratory Species of Wild Animals with Explanatory Notes, Dec. 1978 [hereinafter Second Revised Draft Convention].

<sup>44</sup> CMS, *supra* note 7, art. I, § 1(a).

This definition, by referencing parts of populations, makes clear that the entire species need not be listed in the appendices so long as the portion listed “cyclically and predictably” crosses an international boundary. Thus, the parties have listed the Mediterranean population of the common dolphin (*Delphinus delphis*) in Appendix I as an endangered species even though it is abundant globally.<sup>45</sup> The definition is also broad, covering all species, including marine species, provided they cross at least one jurisdictional boundary. Despite the origin of CMS in Recommendation 32 of the Stockholm Action Plan, which “recommended that Governments give attention to the need to enact international conventions and treaties to protect *species inhabiting international waters* or those which migrate from one country to another,”<sup>46</sup> Japan, the United States, and others wanted to exclude marine species from CMS.<sup>47</sup> With the negotiations winding down, the chair put to a vote a definition inclusive of marine species that a majority of delegations supported; 41 delegations voted to adopt this definition of “migratory species” that included marine species and species in areas beyond national jurisdiction (ABNJ), with 9 against and 4 abstaining.<sup>48</sup>

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<sup>45</sup> See CMS, Appendices I and II of the Convention on the Conservation of Migratory Species of Wild Animals (CMS) (effective May 17, 2024). See also Giovanni Bearzi, *Delphinus delphis*, *Common Dolphin (Mediterranean Subpopulation)*, in *THE IUCN RED LIST OF THREATENED SPECIES* (2003) (classifying the subpopulation as endangered); *Short-Beaked Common Dolphin*, NOAA FISHERIES, <https://www.fisheries.noaa.gov/species/short-beaked-common-dolphin> [<https://perma.cc/XX32-FKAF>] (“Short-beaked common dolphins are one of the most abundant and familiar dolphins in the world.”).

<sup>46</sup> Stockholm Action Plan *supra* note 40, at Recommendation 32.

<sup>47</sup> Japan proposed that all “living marine species” be excluded from the definition of “migratory species.” Conference to Conclude a Convention on the Conservation of Migratory Species of Wild Animals, PL 18, at 1 (June 14, 1979). The United States proposed a definition of “migratory species” that excluded species that “. . . spend a substantial portion of their lives at sea . . .” Conference to Conclude a Convention on the Conservation of Migratory Species of Wild Animals, PL 9, at 1 (June 13, 1979). During the final negotiations, though, the chair noted a “divergence of opinion” on whether the Convention should cover marine species. See Conference to Conclude a Convention on the Conservation of Migratory Species of Wild Animals, SumPI 4, at 2 (June 12, 1979).

<sup>48</sup> See Conference to Conclude a Convention on the Conservation of Migratory Species of Wild Animals, SumPI 14, at 1 (June 22, 1979).

CMS reinforces its extension to ABNJ by imposing its obligations on “Range States” and defining “Range State” to include flag States with vessels fishing in ABNJ.<sup>49</sup> The Convention then defines “range” to mean “*all the areas of land or water that a migratory species inhabits, stays in temporarily, crosses or overlies at any time on its normal migration route,*”<sup>50</sup> and “habitat” as “*any area in the range of a migratory species which contains suitable living conditions for that species[.]*”<sup>51</sup>

The parties have further defined “cyclically and predictably” as relating to “a cycle of any nature, such as astronomical (circadian, annual etc.), life or climatic, and of any frequency,” provided that the cycle can be “anticipated to recur in a given set of circumstances, though not necessarily regular in time.”<sup>52</sup> These definitions appear to preclude the listing of merely “transboundary” species or populations—those that inhabit territory on both sides of an international boundary without otherwise displaying cyclical and predictable behavior.

Moreover, the drafters of the Convention specifically rejected a definition that included transboundary species or populations. The Second Revised Draft, which was used to begin the final negotiations, defined “migratory species” to include “relatively sedentary populations living in border areas, members of which periodically move across boundaries.”<sup>53</sup> While some members of the species needed to periodically move across national boundaries, they did not need to do so “cyclically.”<sup>54</sup> The early revisions to the negotiating

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<sup>49</sup> The adopted definition of “Range State” provides as follows: “Range State” in relation to a particular migratory species means any State ... that exercises jurisdiction over any part of the range of that migratory species, or a State, flag vessels of which are engaged outside national jurisdictional limits in taking that migratory species. See CMS, *supra* note 7, art. I, ¶ 1(h).

<sup>50</sup> *Id.* art. I, ¶ 1(f) (emphasis added).

<sup>51</sup> *Id.* art. I, ¶ 1(g) (emphasis added).

<sup>52</sup> CMS, *Guidelines for Preparing and Assessing Proposals for the Amendment of CMS Appendices*, UNEP/CMS/Res. 13.7, ¶ 3 (2020).

<sup>53</sup> Second Revised Draft Convention, *supra* note 43, at 39 (statement included in explanatory notes).

<sup>54</sup> Second Revised Draft Convention, *supra* note 43, art. 1, ¶ 1(a) (defining “migratory species” to mean “the entire population or any geographically separate part of the population of any species of lower taxon of wild animals, members of which periodically cross national jurisdictional boundaries for the purpose of

text narrowed the scope of the definition. Rather than some members needing to *periodically* cross national boundaries, now a *significant proportion* of the population needed to *cyclically and predictably* cross national boundaries.<sup>55</sup> While other language in the definition continued to evolve, these two limitations remained and were incorporated in the adopted definition of “migratory species.”

The parties tested this limitation at COP12 in 2017 when considering proposals to list the chimpanzee (*Pan troglodytes*),<sup>56</sup> lion (*Panthera leo*),<sup>57</sup> leopard (*Panthera pardus*),<sup>58</sup> and giraffe (*Giraffa camelopardalis*).<sup>59</sup> While many supported the proposals, either implicitly or explicitly agreeing that these species are “migratory,”<sup>60</sup> the proposals appeared more rooted in “dispersal” rather than “migration.” The proponents of the giraffe proposal, for example, stated:

Whilst giraffe migrations are likely largely driven by habitat availability, forage resources, search for mates and/or minimising conflict/predation, the predictability and/or cyclical nature of giraffe migrations and transboundary movements has never truly

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breeding, giving birth or hatching and rearing young, feeding, wintering or summering”).

<sup>55</sup> Conference to Conclude a Convention on the Conservation of Migratory Species of Wild Animals, RT 2, at 1 (June 17, 1979). The text originates from a proposal of the United States. United States, Proposed Amendment to Article 1, PL 9 (June 13, 1979).

<sup>56</sup> See CMS, Proposal for the Inclusion of the Chimpanzee (*Pan troglodytes*) on Appendix I and II of the Convention, UNEP/CMS/COP12/Doc.25.1.1 (2017) [hereinafter Chimpanzee Proposal].

<sup>57</sup> See CMS, Proposal for the Inclusion of the Lion (*Panthera leo*) on Appendix II of the Convention, UNEP/CMS/COP12/Doc.25.1.3 (2017) [hereinafter Lion Proposal].

<sup>58</sup> See CMS, Proposal for the Inclusion of the Leopard (*Panthera pardus*) on Appendix II of the Convention, UNEP/CMS/COP12/Doc.25.1.4 (2017) [hereinafter Leopard Proposal].

<sup>59</sup> See CMS, Proposal for the Inclusion of the Giraffe (*Giraffa camelopardalis*) on Appendix II of the Convention, UNEP/CMS/COP12/Doc.25.1.10 (2017) [hereinafter Giraffe Proposal].

<sup>60</sup> See CMS, *Report of the 12th Meeting of the Conference of the Parties to the Convention on the Conservation of Migratory Species of Wild Animals*, UNEP/CMS/COP12/REPORT, ¶¶ 394–446 (2017) (reporting on the discussion concerning the chimpanzee proposal); see *id.* at ¶ 399 (Peru stating that “Chimpanzees regularly and predictably crossed boundaries”).

been quantified across their range and as such greater research is required to better understand this.<sup>61</sup>

Similarly, proponents of the leopard proposal admitted that “there might be a certain seasonal ‘migration’ according to prey availability,” that the leopard home ranges “can be transboundary in border regions,” and that “the migratory character of leopards in the understanding of the Convention is a consequence of subadult dispersal . . .”<sup>62</sup> The lion proposal squarely makes dispersal, as well as daily navigation for food and water, the key elements of the species’ “migration.”<sup>63</sup>

Dispersal, however, differs from migration.<sup>64</sup> Whereas migration involves cyclical movements through which animals return to certain habitats, dispersal involves one-way movement “to avoid competition, avoid inbreeding, and to colonize new habitats.”<sup>65</sup> Some parties vigorously opposed the proposals on this distinction between dispersal and migration. Uganda, for example, stated that “migration within CMS does not mean cross-border movement

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<sup>61</sup> Giraffe Proposal, *supra* note 59, at 4.

<sup>62</sup> Leopard Proposal, *supra* note 58, at 3.

<sup>63</sup> The proposal states, for example, the following:

For females, larger pride size and lower prey biomass correlated with a larger home range, but prey dispersion throughout the landscape was also a factor. As part of their circadian cycles, lions may need to cross national boundaries daily in order to, for example, access water in very arid regions like the Kalahari Desert. . . .

Dispersal (movement of individuals away from their birth site) is recognized as *one of the most important life-history traits affecting species persistence and evolution and is increasingly relevant for conservation biology as ecosystems become more fragmented.*

Lion Proposal, *supra* note 57, at 3.

<sup>64</sup> See, e.g., Barry Sinervo, *Dispersal, Navigation, and Migration*, 271 (1997) (“Migration is distinct from dispersal . . .”). He contrasts dispersal and migration as follows:

Dispersal results in a tendency for animals that were once aggregated, to become more widely distributed through movement away from aggregations. Dispersal is often one of the first events of independent life. . . . Migration is the seasonal movement between a breeding site and non-breeding site.

*Id.* at 260.

<sup>65</sup> MICHAEL D. BREED & JANICE MOORE, *ANIMAL BEHAVIOR* 246 (2012); see also Giraffe Proposal, *supra* note 59, at 3.

alone” and that, based on a monitoring program initiated in 1965, Uganda could “confirm with scientific certainty that the chimpanzee population of Uganda is not migratory” as defined by the Convention.<sup>66</sup> Others noted that these species were “transboundary”—they inhabit areas on both sides of national boundaries—or that subadults dispersed to find new territories but that neither constituted cyclical and predictable behavior.<sup>67</sup>

Despite this lack of information in the proposals concerning the predictable and cyclical migratory movement of these species, the CMS Scientific Council recommended adoption of all four proposals without specifically commenting on the species’ migratory status of the lion, leopard, and the giraffe.<sup>68</sup> Concerning the chimpanzee, the Scientific Council reported the following:

In response to a question on the cyclical and predictable nature of the species’ migration patterns, as well as the on the significant proportion requirement, the participant speaking on behalf of the proponents replied that all chimpanzee range states had one or more populations that are transboundary, with the exception of Tanzania which had historical transboundary populations. Although little research had been done that could be used to quantify proportions of individuals crossing, extrapolation of our knowledge of chimpanzee movements, together with anecdotal evidence from the Mayombe Forest on the borders of [Democratic Republic of the Congo], Congo and Angola, from the Mondika Research Centre near where Congo borders with Central African Republic and from the now extirpated population that used to migrate seasonally from Côte d’Ivoire into Burkina

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<sup>66</sup> CMS, *Report of the 12th Meeting*, *supra* note 60 at ¶ 398.

<sup>67</sup> Giraffe Proposal, *supra* note 59, ¶ 542 (Tanzania objecting to the giraffe proposal as transboundary but not migratory). *See also* Leopard Proposal, *supra* note 58, ¶ 517 (South Africa commenting that the sub-adult dispersal of leopards did not constitute “migration”).

<sup>68</sup> *See* Scientific Council, Comments on the Proposal for Inclusion of the Lion (*Panthera leo*) in Appendix II of the Convention, UNEP/CMS/COP12/Doc.25.1.3/Add.1; Scientific Council, Comments on the Proposal for Inclusion of the Leopard (*Panthera pardus*) in Appendix II of the Convention, UNEP/CMS/COP12/Doc.25.1.4/Add.1 (2017); Scientific Council, Comments on the Proposal for Inclusion of the Giraffe (*Giraffa camelopardalis*) in Appendix II of the Convention, UNEP/CMS/COP12/Doc.25.1.10/Add.1 (2017).

Faso indicates this species frequently crosses the international borders in search of food.<sup>69</sup>

At COP12, the parties adopted the proposals by overwhelming majorities.<sup>70</sup> In so doing, they indicated their willingness to define broadly “migratory species” and, in particular, the phrase “cyclically and predictably” to include dispersal. This broad interpretation may help ensure that CMS affords protection to those species in need of conservation attention, such as giraffes and lions.<sup>71</sup> Yet, given the current strains on the budget, the parties must be judicious in deployment of the Convention’s conservation tools.

### B. *The Appendices*

Appendix I includes “endangered” migratory species—those species “facing a very high risk of extinction in the wild in the near future.”<sup>72</sup> For these species, CMS imposes specific conservation obligations on Range States. Range States of an Appendix I species must prohibit its taking: “taking, hunting, fishing capturing, harassing, deliberate killing, or attempting to engage in any such conduct.”<sup>73</sup> Range States must also “endeavour” to conserve and restore the habitats of Appendix I species, as well as prevent, remove, or minimize adverse effects of activities or obstacles that seriously or likely to

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<sup>69</sup> Scientific Council, Comments on the Proposal for Inclusion of the Chimpanzee (*Pan troglodytes*) in Appendix I and II of the Convention, UNEP/CMS/COP12/Doc.25.1.1/Add. 1 at 1 (2017).

<sup>70</sup> See CMS, *Report of the 12th Meeting*, *supra* note 60, ¶¶ 444 (chimpanzee), 505 (lion), 522 (leopard), 550 (giraffe).

<sup>71</sup> For example, the United States Fish & Wildlife Service has proposed to list the West African, Kordofan and Nubian giraffes as endangered and the reticulated giraffe and Masai giraffe as threatened under the Endangered Species Act. See Press Release, U.S. Fish and Wildlife Service, US Fish and Wildlife Service Proposes Endangered Species Act Protections for Giraffes (Nov. 20, 2024). Lion populations have declined from 33,000 to 23,000 adult and subadult lions in Africa between 2006 and 2023. S. Nicholson et al., *Panthera leo, Lion*, in THE IUCN RED LIST OF THREATENED SPECIES (2023).

<sup>72</sup> *Guidelines for Preparing and Assessing Proposals*, *supra* note 52, ¶ 1. The parties have not further defined “endangered,” but they have noted that species should be retained in Appendix I if they are designated as “Extinct in the Wild,” “Critically Endangered,” or “Endangered” in the *IUCN Red List of Threatened Species*. *Id.* ¶ 2(b).

<sup>73</sup> CMS, *supra* note 7, art. I, ¶ (1)(i) (definition of taking), III, ¶ 5 (prohibition against taking).

endanger them.<sup>74</sup> As described in Parts II.A and II.B, once a species is included in Appendix I, Range State parties of such species must prohibit their take and undertake obligations to protect the species/habitats and migration.

For Appendix II migratory species, CMS does not impose specific conservation obligations on parties and acts more like a framework treaty setting out general objectives but requiring more specific requirements in a subsequent legal instrument. Appendix II species are those species with an unfavourable conservation status and which require international agreements for their conservation and management, as well as those species that would benefit significantly from international cooperation that could be achieved by an international agreement.<sup>75</sup> Because an endangered Appendix I species can also have an unfavourable conservation status and benefit from an international agreement, species may be included in both Appendix I and Appendix II.<sup>76</sup> For example, six species of sea turtles, including hawksbill (*Eretmochelys imbricata*) and loggerhead (*Caretta caretta*) turtles, are included in both Appendix I and Appendix II, as are many shark and whale species.<sup>77</sup>

CMS Article IV(3) directs Range State Parties of Appendix II species to “endeavour to conclude AGREEMENTS”—in all capital letters—“where these would benefit the species and should give priority to those species in an unfavourable conservation status.”<sup>78</sup> A species has an “unfavourable conservation status” if any one of the following four conditions for a “favourable conservation status” is *not* met: (1) data indicate that the species “is maintaining itself on a long-term basis as a viable component of its ecosystems,” (2) the species’ range is not being reduced or likely to be reduced on a long-term basis, (3) the species has sufficient habitat for the foreseeable future to

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<sup>74</sup> *Id.* art. III.

<sup>75</sup> CMS, *supra* note 7, art. III, ¶ 1 (Appendix I species), art. IV (Appendix II species).

<sup>76</sup> CMS, *supra* note 7, art. IV The Netherlands even proposed that any Appendix I species automatically be included in Appendix II. The Netherlands, Proposed Amendments to the Second Revised Draft, PL 22 (June 14, 1979).

<sup>77</sup> See CMS, Appendices I and II, *supra* note 46.

<sup>78</sup> CMS, *supra* note 7, art. IV, ¶ 3.

maintain its population on a long-term basis, and (4) the species' distribution and abundance "approach historic coverage and levels."<sup>79</sup>

Moreover, in CMS Article IV(4), parties "are encouraged" to conclude "agreements"—in all lower-case letters—"for any population or any geographically separate part of the population of any species or lower taxon of wild animals, members of which periodically cross one or more national jurisdiction boundaries."<sup>80</sup> Consistent with the practice of the parties, this Article uses "Agreements"—with an upper case "A"—to refer collectively to these two types of instruments and uses "AGREEMENTS" only when referring to AGREEMENTS under Article IV(3) and "agreements" only when referring to agreements under Article IV(4).<sup>81</sup>

The plain reading of this text makes clear that AGREEMENTS apply only to "migratory" species included in Appendix II.<sup>82</sup> The species to which agreements might be developed is broader. Rather than use the Convention's definition of migratory species—"a significant proportion of whose members *cyclically and predictably* cross one or more national jurisdictional boundaries"<sup>83</sup>—Article IV(4) refers to species, "members which *periodically* cross one or more national jurisdictional boundaries."<sup>84</sup> Because Article IV(4) omits the phrases "significant proportion" and "cyclically and predictably," Article IV(4) allows for the development of agreements for species that are not migratory within the meaning of the Convention and that are not included in Appendix II.

The goal of an AGREEMENT "shall be to restore the migratory species concerned to a favourable conservation status or to maintain it

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<sup>79</sup> *Id.* art. I, ¶ 1(c)–(d).

<sup>80</sup> *Id.* art. IV, ¶ 4.

<sup>81</sup> CMS, *Implementation of Articles IV and V of the Convention*, UNEP/CMS/Res. 12.8, at pmb. ¶ 3 (2018) ("Noting that colloquially, and in this Resolution, the term 'Agreements' is used to refer in a generic sense to AGREEMENTS, agreements and Memoranda of Understanding as the context may require").

<sup>82</sup> Article IV(3) AGREEMENTS have also included migratory species included in Appendix I that are not also included in Appendix II. *See* CMS, *supra* note 7, art. IV(3).

<sup>83</sup> CMS, *supra* note 7, art. I, ¶ 1(a) (emphasis added).

<sup>84</sup> *Id.* art. IV, ¶ 4 (emphasis added).

in such a status.”<sup>85</sup> Each AGREEMENT “should” cover the entire range of the species and be open to accession by all Range States, regardless of whether they are CMS parties.<sup>86</sup> Article V also specifies the types of provisions each AGREEMENT should include, such as coordinated conservation and management plans; exchange of information; habitat conservation and restoration; and elimination of, to the maximum extent practicable, obstacles to migration; among other conservation and institutional matters.<sup>87</sup> However, the Convention is silent as to the elements of an agreement. Later, the CMS parties agreed that agreements should cover the entire range of the species and be open to all Range States.<sup>88</sup>

From an initial list of 40 species when the treaty entered into force in 1981, Appendix I has grown to more than 170,<sup>89</sup> with another 1,000 species included in Appendix II.<sup>90</sup> Given the unfavourable conservation status of many migratory species, these appendices could include many more species; according to the *IUCN Red List of Threatened Species*, 52 migratory species included solely in Appendix II are critically endangered (24) or endangered (28) and could be included in Appendix I and 399 unlisted migratory species are threatened or near threatened and eligible for Appendix II.<sup>91</sup>

### C. CMS Bodies

Like other modern multilateral environmental agreements, CMS establishes a range of institutions to ensure the proper functioning and implementation of the Convention.<sup>92</sup> It designates a

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<sup>85</sup> *Id.* art. V, ¶ 1.

<sup>86</sup> *Id.* art. V, ¶ 2.

<sup>87</sup> *See id.* art. V, ¶¶ 4–5.

<sup>88</sup> *Implementation of Articles IV and V of the Convention*, *supra* note 81, ¶ 6.

<sup>89</sup> *See* CMS, Appendices I and II, *supra* note 46.

<sup>90</sup> The exact number is not known because some listings include taxa higher than the species level. *See* DAVIS ET AL., *supra* note 1, at 3.

<sup>91</sup> *See id.* at 4, 9–10 (comparing the *IUCN Red List of Threatened Species* with the CMS appendices). *See also id.* at 65 (including a list of globally threatened and near threatened species not yet listed in the CMS appendices).

<sup>92</sup> *See, e.g.*, Convention on Biological Diversity, June 5, 1992, 1760 U.N.T.S. 79 (1992) (entered into force Dec. 29, 1993) (establishing a Conference of the Parties (art. 23), Secretariat (art. 24), and Subsidiary Body on Scientific, Technical and Technological Advice (art. 25)).

Conference of the Parties (COP), comprising each party, as the decision-making body of the Convention, which meets roughly every three years.<sup>93</sup> Given the three-year interval between meetings of the COP, the parties also created a Standing Committee based on regional representation to provide advice and assistance to the parties and the Secretariat, oversee the execution of the budget, prepare resolutions for consideration of the COP, and perform other tasks given to it by the COP.<sup>94</sup> The Convention also creates a Scientific Council comprising qualified experts from the parties, as well as a number of COP-appointed experts on issues such as climate change, aquatic species, and other subject matter areas identified by the parties.<sup>95</sup> A Secretariat, based mostly in Bonn with a smaller office in Abu Dhabi, arranges for and services meetings of the parties and provides other services for the parties.<sup>96</sup> As described in Part III.D, while this structure is conducive to implementing CMS effectively, the small size of the Secretariat and the growing work load generated by COP undermines the CMS's success.

## II. BUILDING A SUCCESSFUL TREATY REGIME FOR PROTECTING MIGRATORY SPECIES

CMS and its parties have done much, particularly since the mid-1990s, to improve implementation of the treaty, including the prohibition against take.<sup>97</sup> In addition, an array of resolutions guide implementation of the Convention's provisions concerning habitat conservation and restoration and removing obstacles to migration.<sup>98</sup> Moreover, after a slow start to developing Agreements, the parties

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<sup>93</sup> See CMS, *supra* note 7, art. VII.

<sup>94</sup> See CMS, *Composition and Organisation of the Standing Committee*, UNEP/CMS/Res. 9.15 (2008).

<sup>95</sup> See CMS, *supra* note 7, art. VIII; CMS, UNEP/CMS/Res. 12.4 (Rev.COP14) (Feb. 2024). The subject matter areas for the 2024–2026 period are aquatic mammals, birds, bycatch, climate change, connectivity/networks, fish, invasive species and disease, and marine pollution. See CMS, *Report of the Fourteenth Meeting of the Conference of the Parties to the Convention on the Conservation of Migratory Species of Wild Animals*, UNEP/CMS/COP14/Report at ¶¶ 113–14 (2024).

<sup>96</sup> See CMS, *supra* note 7, art. IX.

<sup>97</sup> See *infra* Part II.A.

<sup>98</sup> See *infra* Part II.B.

have now adopted twenty-six of them, as well as a large number of action plans for specific species or groups of species.<sup>99</sup> And, like many multilateral environmental treaties, it now has a compliance mechanism, as well as a program to assess the consistency of national legislation with the obligations pertaining to Appendix I species.<sup>100</sup>

### A. *The Prohibition Against Taking Appendix I Species*

#### 1. Implementation of the Take Prohibition

Article III(5) provides that Range State parties of Appendix I migratory species “shall prohibit the taking of animals belonging to such species.”<sup>101</sup> The prohibition is intended to apply broadly. First, “taking” is defined as “taking, hunting, fishing, capturing, harassing, deliberate killing, or attempting to engage in any such conduct.”<sup>102</sup> Unlike the obligations of Article III(4), the take prohibition is not qualified by the phrase “shall endeavour” or “to the extent feasible.” Second, exceptions may be applied “only if” the taking is for scientific purposes, to enhance the propagation or survival of the affected species, to accommodate the needs of traditional subsistence users of such species, or if extraordinary circumstances so require.<sup>103</sup> The exceptions must also be “precise as to content and limited in space and time,” and “not operate to the disadvantage of the species.”<sup>104</sup> Thus, year-round exceptions that apply across the entire territory of a party would not seem to qualify because they are not limited in space and time.

Most parties report that they are implementing the take prohibition fully. An analysis of national reports for the Fourteenth Conference of the Parties (COP14) in 2024 found that 84% of reporting parties stated that taking was prohibited for all Appendix I species within their territory, while others that did not cover all species or territory were moving to enact additional legislation to remove the

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<sup>99</sup> See *infra* Part II.C.3.

<sup>100</sup> See *infra* Part II.D.

<sup>101</sup> CMS, *supra* note 7, art. III, ¶ 5.

<sup>102</sup> *Id.* art. I, ¶1(i).

<sup>103</sup> *Id.* art. III, ¶ 5(a)–(d).

<sup>104</sup> *Id.* art. III, ¶ 5.

gap.<sup>105</sup> The Secretariat has provided extensive legislative guidance on implementation of the take prohibition that includes text of a model law and specific examples of how parties implement the prohibition.<sup>106</sup> In addition, parties have reported that they allow very few exceptions to the take prohibition and are taking action to improve enforcement of the take prohibition.<sup>107</sup>

The reality, however, may not match these positive self-assessments. For example, not all parties prohibit the taking of all Appendix I species.<sup>108</sup> Some parties have no legislation to implement the take prohibition.<sup>109</sup> Others do not identify whether any law prohibits the take of particular taxonomic groups.<sup>110</sup> When parties identify legislation to implement the take prohibition, they often do not provide sufficient information to accurately assess the scope of the take prohibition.<sup>111</sup>

In addition, the Secretariat reports that “[p]arties are not consistently notifying the Secretariat of their exceptions as required by Article III.7 of the Convention.”<sup>112</sup> Even if parties are not reporting

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<sup>105</sup> UNEP-WCMC, ANALYSIS OF CMS NATIONAL REPORTS TO COP14, 8 (2023).

<sup>106</sup> See CMS, *Review Mechanism and National Legislation Programme*, UNEP/CMS/COP13/Doc.22, annex 2 (Nov. 15, 2019).

<sup>107</sup> ANALYSIS OF CMS NATIONAL REPORTS TO COP14, *supra* note 105, at 9, 21, tbl. 10–1.

<sup>108</sup> See *id.* at 8.

<sup>109</sup> See *id.*

<sup>110</sup> See, e.g., CMS Secretariat, Antigua and Barbuda: Inventory: Implementation of Articles III.4 and III.5, 1 (undated); CMS Secretariat, Spain: Inventory: Implementation of Articles III.4 and III.5 of the Convention, 1, 2, 3, 5 (undated). See, e.g., CMS, Philippines: Inventory—Implementation of Articles III.4 and III.5 of the Convention, 2 (undated); CMS, United Kingdom—Inventory of Articles III.4 and III.5 of the Convention, 1–2 (undated).

<sup>111</sup> The national legislation inventory for Spain, for example, states in several places that “insufficient information is provided to understand how species are actually protected and not clear in what way the following legislation is specifically relevant to the take prohibition.” See CMS Secretariat, Spain: Inventory: Implementation of Articles III.4 and III.5 of the Convention, *supra* note 110.

<sup>112</sup> CMS Secretariat, *Review Mechanism and National Legislation Programme*, UNEP/CMS/COP14/Doc.24, ¶ 21 (Oct. 10, 2023).

any exceptions, the scope of available exceptions remains unidentified.<sup>113</sup> As such, the use of exceptions remains unclear.

An improved understanding of implementation—and actual implementation—of the take prohibition could certainly be enhanced through better and more precise reporting by parties.<sup>114</sup> As part of the National Legislation Programme, the Secretariat is charged with reviewing national reports and other information submitted by parties.<sup>115</sup> But, those inventories are only as robust as the information provided by the parties. More parties must report, and all parties must report with enough detail to allow for sufficient review of their implementation of the take prohibition.

## 2. Are Unintentional Takes Prohibited?

One significant question left unanswered by Article III(5) is the extent to which the definition of “taking” includes unintentional taking, such as bycatch in fisheries. If a longline fishing vessel flagged to a CMS party unintentionally catches an Appendix I great white shark (*Carcharodon carcharias*) while fishing for tuna, has it violated the prohibition against “take”? The Vienna Convention on the Law of Treaties (VCLT) and customary rules of treaty interpretation provide that a treaty must be interpreted in good faith in accordance with the ordinary meaning of the terms of the treaty in their context and in light of its object and purpose.<sup>116</sup> The context includes the

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<sup>113</sup> See, e.g., CMS Secretariat, Zimbabwe: Implementation of Articles III.4 and III.5 of the Convention (undated) (stating that the scope of exceptions is either unknown or that “no law is identified to determine the scope of permissible exceptions”).

<sup>114</sup> Article VI requires parties to submit reports on “measures that they are taking to implement the provisions of this Convention for [Appendix I and II] species.” CMS, *supra* note 7, art. VI, ¶ 3.

<sup>115</sup> See *National Legislation Programme*, CMS, <https://www.cms.int/en/activities/national-legislation-programme> [<https://perma.cc/UKZ8-6EN2>] (last visited Oct. 14, 2025) (describing the process under which parties to the CMS Convention fill out questionnaires that the Secretariat must review and respond to with recommendations to ensure the parties’ compliance with the Convention).

<sup>116</sup> Vienna Convention on the Law of Treaties art. 31, May 23, 1969, 1155 U.N.T.S. 331 (entered into force Jan. 27, 1980) [hereinafter VCLT]. The Vienna Convention does not apply retroactively. *Id.* art. 4. Nonetheless, its rules apply to interpretation of the ICRW, because the Vienna Convention codifies customary international law regarding interpretation of treaties. See IAN M. SINCLAIR, *THE VIENNA CONVENTION ON THE LAW OF TREATIES* 19 (1973) (“[T]here is now strong

treaty, its preamble and annexes, as well as any agreement or instrument relating to the treaty.<sup>117</sup>

Applying this rule to the definition of “taking,” however, yields at least three possible interpretations. First, Article I.1(i) uses the word “deliberate” (i.e., intentional) to modify killing, but not “taking, hunting, fishing, capturing or harassing.” Thus, “taking” could be interpreted to prohibit “deliberate,” that is intentional, killing but not unintentional killing. In contrast, because “deliberate” does not modify “taking, hunting, fishing, capturing or harassing,” “taking” could be interpreted to include intentional *and* unintentional “taking, hunting, fishing, capturing or harassing.” If the drafters had intended only deliberate taking to be prohibited, they would have inserted “deliberate” at the beginning of the list of types of taking; that is, they would have defined “taking” to mean “deliberate taking, hunting, fishing, capturing, harassing, and killing.”

Such an interpretation appears supported by the negotiating history. Like all drafts preceding it, the last pre-conference draft from December 1978—the one used to begin the final negotiations—did not include the word “deliberate” in the definition of “taking.”<sup>118</sup> Instead, it defined “taking” as “taking, hunting, fishing, killing or capturing.”<sup>119</sup> However, a drafting committee established during the negotiations inserted the word “deliberate” before “killing” *and* “harassing”; it also added the term “capturing” *before* the word “deliberate.”<sup>120</sup> This change came after the United Kingdom

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judicial support for the view that the rules of treaty interpretation incorporated in the [Vienna] Convention are declaratory of customary international law.”); IAN BROWNLIE, *PRINCIPLES OF PUBLIC INTERNATIONAL LAW* 608 (5th ed. 1998) (stating that “a good number,” although not all, of the provisions of the Vienna Convention express general international law, and those that do not “constitute presumptive evidence of emergent rules of general international law”). This textual approach to interpretation has attained the status of customary international law. *See, e.g.*, Case Concerning the Territorial Dispute (Libyan Arab Jamahiriya v. Chad), Judgment, 1994 I.C.J. 6, at 22 (Feb. 3) (applying VCLT approach to treaty interpretation); OPPENHEIM’S *INTERNATIONAL LAW: PEACE*, 1271–75 (Jennings & Watts eds., 9th ed. 1992).

<sup>117</sup> See VCLT, *supra* note 116, art. 31.

<sup>118</sup> Second Revised Draft Convention, *supra* note 43, art. I, ¶ 1(f).

<sup>119</sup> *Id.*

<sup>120</sup> Conference to Conclude a Convention on the Conservation of Migratory Species of Wild Animals, RT 2/Rev. 1, art. I, ¶ 1(g) (June 18, 1979).

proposed the inclusion of “deliberate” before “killing or capturing,” stating that “[u]nintentional killing—such as treading on or running over—must be eliminated from the list of prohibitions.”<sup>121</sup> The text adopted, however, defines “taking” as “taking, hunting, fishing, capturing, harassing, deliberate killing, or attempting to engage in any such conduct.”<sup>122</sup>

In other words, the drafters first inserted the word deliberate to modify both killing and harassing. The drafters then moved the term “harass” so that it was not modified by the term “deliberate.” Because the drafters provisionally approved and adopted this text “without discussion,”<sup>123</sup> any explicit reasoning of the drafters for the final position of “deliberate” is missing.<sup>124</sup> Yet, the purposeful insertion of “deliberate” to modify “killing” but not “harassing” provides compelling support for the conclusion that *unintentional* takes resulting from hunting, fishing, and capturing are prohibited. Thus, unintentional “killing,” such as hitting an Appendix I bird with your car while you drive, is not prohibited. Conversely, unintentional capturing of Appendix I species such as sea turtles and cetaceans in fishing nets or on longlines as bycatch constitutes a “take” and is prohibited by Article III(5) in the absence of a valid exception.<sup>125</sup>

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<sup>121</sup> United Kingdom, Proposed Amendment to the Second Draft Dated December 1978, PL 3, 4 (June 11, 1979). The United Kingdom also proposed that “deliberate disturbance” be prohibited. Its proposed amendment read in full: “‘Taking’ means taking, hunting fishing, deliberate killing or capturing and deliberate disturbance.” *Id.*

<sup>122</sup> CMS, *supra* note 7, art. I, ¶ 1(i). The prohibition against attempting to take Appendix I animal originates from an Australian proposal. Australia, Proposed Amendments to the Draft Convention, PL 30, 2 (June 14, 1979).

<sup>123</sup> Conference to Conclude a Convention on the Conservation of Migratory Species of Wild Animals, SumPl 10, 1 (June 21, 1979).

<sup>124</sup> SumPl 14, *supra* note 48, at 1–2.

<sup>125</sup> Others have supported this view. *See, e.g.,* BOWMAN, DAVIES & REDGWELL *supra* note 41, at 548 (2d ed. 2010) (“It is noteworthy that, whereas ‘killing’ must be deliberate to constitute a ‘taking,’ capture apparently need not be. Consequently, the accidental by-catch in fishing nets of marine turtles, cetaceans and seabirds (still a major threat to certain species) is an activity that must be rigorously controlled.”); *see also* Lyster, *The “Bonn Convention,” supra* note 13, at 988 (“Since the entanglement of turtles in the trawls clearly constitutes ‘capturing’ or ‘harassing,’ even if the killing of turtles is deemed not to be ‘deliberate,’ it is probably fair to conclude that article III(5) imposes a legal duty on parties that are Range States of the Atlantic ridley to prohibit the use of shrimp trawls in areas

The second interpretation limits all forms of “taking” to intentional “taking.” Under this interpretation, it is assumed that “hunting, fishing, capturing, and harassing” are deliberate acts. One does not unintentionally hunt or fish. This interpretation has problems, however, because not all capturing and harassing of animals is intentional in the same way that hunting and fishing are always intentional. For example, noise from vessels, seismic testing, and sonar is known to harass cetaceans and other species, yet those engaged in those activities do not intend to harass migratory species.<sup>126</sup> In addition to bycatch in fisheries, in which listed species are undoubtedly captured unintentionally, Appendix I birds are also unintentionally captured in mist nets during migration. In fact, “[e]ach year, up to 6.2 million exhausted birds, migrating between their breeding and wintering grounds, are caught in illegally set nets stretching for hundreds of kilometres along the North African coastline.”<sup>127</sup> The intention is not to capture CMS Appendix I species. The intent is likely to capture European goldfinches (*Carduelis carduelis*) or other species, which are caught for trade as pets or food.<sup>128</sup> Nonetheless, many Appendix I bird species are caught in the mist nets.<sup>129</sup> In none of these cases, however, are parties reporting that these acts

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where the turtle occurs unless the trawls are fitted with ‘Turtle Excluder Devices.’”).

<sup>126</sup> In the United States, seismic testing and Navy sonar testing have been considered “harassment” under the Marine Mammal Protection Act, 16 U.S.C. §§ 1361–1423. *See, e.g.*, *Native Village of Chickaloon v. Nat’l Marine Fisheries Serv.*, 947 F. Supp. 2d 1031, 1037, 1039 (D. Alaska 2013) (recognizing that seismic testing for oil would harass belugas); *NRDC v. Pritzker*, 828 F.3d 1125, 1131–32 (9th Cir. 2016) (concluding that Navy sonar testing would harass various species of marine mammals).

<sup>127</sup> Press Release, CMS, New Task Force Set to Stop Illegal Killing, Taking and Trade of Migratory Birds (May 9, 2016), <https://www.cms.int/en/news/new-task-force-set-stop-illegal-killing-taking-and-trade-migratory-birds> [<https://perma.cc/GF2A-F4FT>].

<sup>128</sup> *See* Rassim Khelifa et al., *Unraveling the Drastic Range Retraction of an Emblematic Songbird of North Africa: Potential Threats to Afro-Palearctic Migratory Birds*, 7 SCI. REPORTS 3 (2017).

<sup>129</sup> *The Prevention of Illegal Killing, Taking and Trade of Migratory Birds*, *supra* note 20, at pmbl. para. 8 (“Aware that the use of mist nets and other nets is a major cause of illegal, killing, taking, and trade of birds, including of CMS Appendix I species and that control of the production and sale of such nets can be the most effective way of reducing such illegal activity,”).

constitute prohibited takes or are subject to an exception. Implicitly, the parties have adopted this interpretation which focuses on an intention to take an Appendix I animal, not whether one has intended to engage in any of the activities constituting a take.

This interpretation is troubling because it is not consistent with the placement of “deliberate” only before killing when it is clear that unintentional capturing and harassing can readily occur. In fact, the United States commented prior to the negotiations that the take prohibition might bar the incidental take of sea turtles in shrimp trawling.<sup>130</sup> This interpretation is also not consistent with the intent of the drafters to limit exceptions to “exceptional circumstances” to ensure immediate protection and rapid conservation gains for Appendix I species.<sup>131</sup> In fact, many commenters on early drafts argued that this exception was far too narrow and should include exceptions to enhance the survival of the species<sup>132</sup> or for scientific or educational purposes.<sup>133</sup> Yet, these suggestions were initially rejected<sup>134</sup> and adopted only during the final negotiating conference in Bonn.<sup>135</sup> Nonetheless, the drafters’ intent to keep the range of exceptions narrow is evidenced by the rejection of the United Kingdom’s proposal to delete the requirement that exceptions “not disadvantage the species.”<sup>136</sup>

Whereas the second interpretation focuses on the intention to kill an individual of an Appendix I species, the third possible

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<sup>130</sup> See U.S. DEP’T OF STATE, DRAFT ENVIRONMENTAL IMPACT ASSESSMENT FOR THE CONVENTION ON THE CONSERVATION OF MIGRATORY SPECIES OF WILD ANIMALS, 74 (1979).

<sup>131</sup> Explanatory Notes on Revised Draft Convention on the Conservation of Migratory Species of Wild Animals, at 39 (Aug. 5, 1977).

<sup>132</sup> See, e.g., Letter from F. Wayne King, Dir. of Zoology and Conservation, N.Y. ZOOLOGICAL SOC’Y, 6 (Jan. 2, 1978) (on file with author) (seeking to expand the exceptions to “approved conservation purposes”).

<sup>133</sup> See, e.g., Letter from Micheal J. Bean, Environmental Law Institute, to Francoise Burhenne-Guilmin, IUCN, 3 (Dec. 6, 1977) (on file with author).

<sup>134</sup> Second Revised Draft Convention, *supra* note 43, art. III, ¶ 3 (retaining exceptions only if “extraordinary circumstances so require”).

<sup>135</sup> See Conference to Conclude the Convention on the Conservation of Migratory Species of Wild Animals, *Final Act of the Conference to Conclude the Convention on the Conservation of Migratory Species of Wild Animals*, RT 5, art. III, (June 23, 1979)

<sup>136</sup> Proposed Amendment to the Second Draft, *supra* note 121, at 12.

interpretation focuses on the intention to engage in particular acts, such as hunting, fishing, capturing, or harassing.<sup>137</sup> Under this interpretation, all intentional and reasonably foreseeable takes—even if unintentional—of an Appendix I animal are prohibited. This approach would support the overall objective of CMS to improve the conservation status of Appendix I species by prohibiting activities that are highly likely to result in a take of Appendix I species. This is the approach adopted by the European Union under the Habitats Directive<sup>138</sup> and the United States under the Endangered Species Act.<sup>139</sup>

Under the Habitats Directive, EU member States are required to prohibit “all forms of deliberate capture or killing” of species in need of strict protection.<sup>140</sup> In *Commission v. Greece*, the Court of Justice of the European Union (CJEU) noted that Greece allowed the use of mopeds on known nesting beaches of loggerhead sea turtles (*Caretta caretta*) and the use of small boats near those beaches during the breeding season, even though such activities were prohibited.<sup>141</sup> The Court concluded that Greece “did not take . . . all the requisite specific measures to prevent the deliberate disturbance of the sea turtle *Caretta caretta* during its breeding period.”<sup>142</sup> Even though Greece did not intentionally disturb or intentionally allow the disturbance of the species’ habitat, the Court found that Greece’s knowledge and acceptance of the consequences violated the Habitat’s prohibition against “deliberate” disturbance.

In a subsequent case, *Commission v. Cyprus*, the Court declared that Cyprus had failed to take all requisite measures to prohibit the deliberate killing and deliberate disturbance of the Cypriot grass snake (*Natrix natrix cypriaca*) “by tolerating activities,”

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<sup>137</sup> See, e.g., Endangered Species Act of 1973 § 3(19), 16 U.S.C. § 1532(19) (defining a “take” as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct”).

<sup>138</sup> See Council Directive 92/43, 7, 1992, O.J. (L 206, 22) (EC) [hereinafter Habitats Directive].

<sup>139</sup> See Endangered Species Act of 1973 § 3(19), 16 U.S.C. § 1532(19) (defining a “take” as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct”).

<sup>140</sup> See Habitats Directive, *supra* note 138, art. 12(a), annex IV(a).

<sup>141</sup> Case C-103/00, *Comm’n v. Greece*, ¶¶ 35, 37 (Jan. 30, 2002).

<sup>142</sup> *Id.* at ¶ 39.

including excessive withdrawal of water, property development, and motocross racing, in the species' known habitat.<sup>143</sup> In contrast, when Spain allowed activities in the habitat of the otter (*Lutra lutra*) but had no knowledge of the species' presence, it did not violate Article 12(1) of the Habitats Directive. As the Court explained, "for the condition as to 'deliberate' action in Article 12(1)(a) of the Directive to be met, it must be proven that the author of the act intended the capture or killing of a specimen belonging to a protected animal species or, at the very least, accepted the possibility of such capture or killing."<sup>144</sup>

Consistent with the CJEU's jurisprudence, the European Commission has summarized "deliberate" actions in the context of "deliberate killing" and "deliberate disturbance" of the Habitats Directive to mean the following:

"[D]eliberate" actions are to be understood as actions carried out by a person or body who knows that their action will most likely lead to an offence against a species, but chooses to ignore the risks or consciously accepts the foreseeable results of his action.

In other words, the provision applies not only to a person who intends to capture or kill a specimen of a protected species but also to a person who is sufficiently informed and aware of the likely consequences of his/her action but goes ahead anyway.<sup>145</sup>

Elsewhere, the European Commission has written that the provision is violated when "**a person . . . is sufficiently informed and aware of the consequences his or her action will most likely have and nevertheless still performs the action, which leads to the capturing or killing of specimens** (e.g. as an unwanted but accepted side-effect) (conditional intent)."<sup>146</sup>

Notably, the African-Eurasian Waterbird Agreement (AEWA)—negotiated under the auspices of CMS—has adopted the

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<sup>143</sup> See Case C-340/10, *Comm'n v. Cyprus*, ¶¶ 61–69 (Mar. 15, 2012).

<sup>144</sup> See Case C-221/04, *Comm'n v. Spain*, ¶ 71 (May 18, 2006) (emphasis added).

<sup>145</sup> EUROPEAN COMMISSION, THE STRICT PROTECTION OF ANIMAL SPECIES OF COMMUNITY INTEREST UNDER THE HABITATS DIRECTIVE: A SUMMARY 6 (2021).

<sup>146</sup> EUROPEAN COMMISSION, COMMISSION NOTICE: GUIDANCE DOCUMENT ON THE STRICT PROTECTION OF SPECIES OF COMMUNITY INTEREST UNDER THE HABITATS DIRECTIVE C(2021) 7301 FINAL 25 (2021) (emphasis in original).

European Commission’s interpretation of “deliberate” in the context of interpreting “deliberate disturbance” in the AEWa Action Plan.<sup>147</sup> The AEWa parties developed additional guidance to help clarify the concept of “foreseeability”:

The definition of “deliberate” proposed includes those actions which, although disturbance to waterbirds is not their primary motivation, it would be the probable consequence of the action or human behaviour concerned. Thus, for example, it is not the purpose of kite surfing or other recreation activities such as jet-skiing on the coast to disturb waterbirds, but this will be the consequence of using such equipment within a breeding seabird colony and indeed could readily be avoided.<sup>148</sup>

The United States has adopted a similar approach under the U.S. Endangered Species Act (ESA), which prohibits the take—“to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct”—of any endangered species.<sup>149</sup> The U.S. Supreme Court in *Babbitt v. Sweet Home* concluded that the ESA prohibits “takes” so long as they are “foreseeable rather than merely accidental.”<sup>150</sup> Interpreting *Sweet Home*, a Circuit Court noted that “[p]roximate cause and foreseeability are required to affix liability for ESA violations.”<sup>151</sup> Thus, a state’s licensing of fishers in areas known to cause entanglement of endangered right whales violated the ESA because it was not possible to

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<sup>147</sup> See Adoption of Guidance in the Context of Implementation of the AEWa Action Plan, Res. 6.7, Appendix I at 4 (Nov. 14, 2015). See also Melissa Lewis, *Sustainable Use and Shared Species: Navigating AEWa’s Constraints on the Harvest of African-Eurasian Migratory Waterbirds*, 32 GEO. ENV’T. L. REV. 299, 327–30 (2020) (discussing the “take” prohibition under AEWa and, in particular, AEWa’s interpretation of “deliberate”).

<sup>148</sup> *Id.*

<sup>149</sup> Endangered Species Act of 1973 § 3(19), 16 U.S.C. § 1532(19) (defining “take”); *id.* at § 9(a)(1)(B)–(C), 16 U.S.C. § 1538(a)(1)(B)–(C) (prohibiting takes). In addition, by regulation, the U.S. Fish & Wildlife Service extends the take prohibition to threatened species. Endangered and Threatened Wildlife and Plants, 50 C.F.R. §§ 17.21(c)(1), 17.31(a) (2025).

<sup>150</sup> *Babbitt v. Sweet Home Chapter of Communities for a Great Or.*, 515 U.S. 687, 700 (1995).

<sup>151</sup> *Aransas Project v. Shaw*, 775 F.3d 641, 656 (5th Cir. 2014).

license the use of gillnets or lobster pots “without risk of violating the ESA by exacting a taking.”<sup>152</sup>

So which interpretation should prevail? As noted, the second interpretation—limiting the take prohibition to intentional takes—is not consistent with the drafters’ decision to omit “deliberate” before “harassing” when it is known that unintentional harassment from noise and other activities can result in take. At the same time, neither the first nor the third interpretations of “take” is trouble free. In particular, neither fits easily into the CMS regime for exceptions to the take prohibition. Given the application of CMS to species in the marine environment and the significance of fisheries, one might have assumed that the drafters would have established an exception for unintentional or reasonably foreseeable incidental takes, such as from bycatch. Exceptions for incidental takes are often specifically incorporated into relevant law, as is the case with both the Habitats Directive<sup>153</sup> and the ESA.<sup>154</sup> Under CMS, however, the exceptions are limited to scientific purposes, enhancing the survival of the species, traditional subsistence users, and extraordinary circumstances, provided that they are also precise as to content and limited in space

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<sup>152</sup> *Strahan v. Coxe*, 127 F.3d 155, 164 (1st Cir. 1997). *See also* *Animal Welfare Inst. v. Martin*, 623 F.3d 19, 26 (1st Cir. 2010) (holding that Maine violated the ESA by permitting the use of animal traps that might incidentally trap endangered lynx). In a case involving the definition of “harm,” which may constitute a “take” under the ESA, the Supreme Court concluded that a landowner who knowingly drained a pond inhabited by endangered fish would not escape ESA liability for destroying habitat, nor would a party that logged a habitat of endangered spotted owls. *Sweet Home*, 515 U.S. at 692, 695, 699–700.

<sup>153</sup> The Habitats Directive authorizations “derogations” from Article 12’s prohibitions “to prevent serious damage, in particular to crops, livestock, forests, fisheries and water and other types of property.” Habitats Directive, *supra* note 138, art. 16(1)(b). It also requires monitoring of incidental capture and killing of species of community interest. *Id.* art. 12(4).

<sup>154</sup> The ESA allows the Secretary of the Interior to issue an incidental take permit authorizing “takes” that are “incidental to, and not the purpose of, the carrying out of an otherwise lawful activity.” 16 U.S.C. § 1539(a)(1)(B). *See also id.* at § 1536(b)(4)(C)(i)–(iv) (establishing criteria for incidental take permits); 50 C.F.R. §§ 402.02, 402.14(g)(7) (2024) (requiring the U.S. Fish and Wildlife Service and the National Marine Fisheries Service to formulate statements concerning foreseeable incidental takes).

and time.<sup>155</sup> None of these can be interpreted broadly enough to encompass, for example, incidental taking in commercial fisheries. As noted above, the negotiating history evinces an intent to allow exceptions only in narrow circumstances.

Moreover, vessels may not know which Appendix I species they may catch or where they may catch them, although this is not universally true.<sup>156</sup> An open-ended exception to catch any CMS Appendix I species whenever and wherever the vessel is licensed to fish might not meet the requirement that any exception be “limited in space and time.”<sup>157</sup> Also, without knowing the volume of bycatch of any species or the location of the bycatch, a CMS party would not be able to determine whether the exception would disadvantage the species, although a party might be able to meet this requirement by establishing a bycatch quota if sufficient information is available to make such a finding.<sup>158</sup> Some parties to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) are issuing relevant CITES documents authorizing trade in protected species in this way.<sup>159</sup>

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<sup>155</sup> CMS Convention, *supra* note 7, art. III, ¶ 5. Similarly, the legally binding AWEA Action Plan requires parties to “regulate the modes of taking,” and parties may grant exceptions to the take prohibition to accommodate livelihoods. AWEA, *infra* note 260, at Annex 3, ¶ 2.1.2. It further provides that “appropriate measures shall especially address incidental killing and bycatch in fishing gear including the use of gill nets, longlines and trawling.” *Id.* at ¶ 4.3.7.

<sup>156</sup> One study, for example, mapped movements of pelagic sharks with industrial fishing, showing “high-seas hotspots of shark space use.” Nuno Queiroz et al., *Global Spatial Risk Assessment of Sharks under the Footprint of Fisheries*, 572 *NATURE* 461, 461 (2019).

<sup>157</sup> See CMS, *Legislative Guidance Document: Exceptions to the Prohibition on Taking of Appendix I-Listed Species under CMS Article III.5*, UNEP/CMS/GWL/Doc.3, ¶¶ 20–25 (2025) (describing the specificity needed for a valid exception under the “limited in space and time” criteria).

<sup>158</sup> See *id.* ¶¶ 26–27 (noting that numerical caps—that is, specifying the volume of individuals that can be taken—can help ensure that an exception does not disadvantage the species).

<sup>159</sup> See Hugh Robertson, Making NDFs for Shortfin Mako in ABNJ near New Zealand (undated); U.S. Approach to Making NDFs for Appendix-II Listed Sharks in Areas Beyond National Jurisdiction (ABNJ) (undated). Both presentations were presented to the CITES technical workshop on *Non-detriment findings for specimens of Appendix-II species taken from areas beyond national jurisdiction*, from April 25th to 26th, 2024.

In addition, the practice of the parties, which treaty interpreters are directed to take into account,<sup>160</sup> suggests that the parties do not accept either the first or third interpretations; no CMS Party has reported that it prohibits the bycatch of Appendix I species, reported bycatch of such species as an exception as required by CMS,<sup>161</sup> or sought an interpretation of whether bycatch or other unintentional take violates the Convention. Nonetheless, the first and third interpretations cannot be ruled out. Not only did the drafters always intend the exceptions to be interpreted narrowly, but the agreed-upon exceptions are themselves very narrow. As CMS Appendix I species are “endangered”—that is, “in danger of extinction”<sup>162</sup>—and 89% of CMS Appendix I species are affected by overexploitation,<sup>163</sup> prohibiting unintentional takes, particularly reasonably foreseeable unintentional takes, is entirely reasonable.

The third interpretation finds some support in the resolution on *The Prevention of Illegal Killing, Taking and Trade of Migratory Birds*, which implicitly suggests that reasonably foreseeable takes might violate the CMS take prohibition. Its preamble references killing of birds, including Appendix I birds, in mist nets and by using poisoned baits against carnivores, suggesting a broader scope to “take” than only deliberate killings.<sup>164</sup> In addition, the resolution’s reference to “wild birds” and not solely “migratory birds” and to “trade”—which is not prohibited by CMS—suggests the resolution has a broader scope than provided by CMS Article III(5).

Nevertheless, the resolution’s operative paragraphs urge parties to adopt a “zero-tolerance approach to any *deliberate* illegal killing, taking and trade of wild birds . . .”<sup>165</sup> It further urges parties to adopt

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<sup>160</sup> VCLT, *supra* note 116, art. 31, ¶ 3(b).

<sup>161</sup> See CMS, *supra* note 7, art. III, ¶ 7.

<sup>162</sup> CMS, *supra* note 7, arts. I, ¶ 1(e), III, ¶ 1.

<sup>163</sup> DAVIS ET AL., *supra* note 1, at 26.

<sup>164</sup> *The Prevention of Illegal Killing, Taking and Trade of Migratory Birds*, *supra* note 20, at pmbl. paras. 7–8.

<sup>165</sup> *Id.* at ¶ 1 (emphasis added). Similarly, the CMS Intergovernmental Task Force on Illegal Killing, Taking and Trade of Migratory Birds in the Mediterranean (MIKT) and the Bern Convention have developed a Scoreboard to assess the progress in combating illegal killing, taking and trade of wild birds (IKB). The Scoreboard defines the illegal killing of birds as “those unlawful activities committed intentionally resulting in the death, injury or removal of specimens of wild

“. . . adequate national legislation to protect migratory species . . . in line with CMS . . .” The resolution never defines deliberate illegal killing and taking of wild birds in relation to the CMS definition of “take” concerning CMS Appendix I migratory birds or specifically describes adequate legislation as including a definition of “take” that prohibits unintentional takes.<sup>166</sup> Moreover, the resolution never mentions bycatch of albatrosses, petrels, and other seabirds in commercial fisheries, indicating that the parties were not intending to establish a unified definition of “take” that includes unintentional takes. Consequently, it may be more prudent to interpret the resolution as covering intentional takes only.

To date, no controversies have emerged among the parties as to whether “take” includes unintentional takes. Yet, given the growing number of marine species included in the Appendices that might be caught as bycatch and the large number of Appendix I birds killed in mist nets each year, the parties may wish to adopt a resolution that explicitly states whether the take prohibition applies to bycatch and other unintentional takes.<sup>167</sup> In at least one instance, however, the parties showed their unwillingness to do so when they rejected a proposal to prohibit the use of Appendix I-listed chondrichthyan species, including those that were caught as bycatch, or even to report on bycatch of chondrichthyan species.<sup>168</sup> This further suggests that the parties do not embrace a definition of taking that prohibits unintentional takes. Assuming that is correct, the parties have opted for an interpretation that makes recovery of species more difficult.

#### *B. Protecting and Restoring Habitats and Addressing Threats to*

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birds from the wild either dead or alive, including their parts or derivatives.” Secretariats of the Bern Convention and CMS, *Scoreboard to Assess the Progress in Combatting Illegal Killing, Taking and Trade of Wild Birds (IKB)*, 5, n.1, (July 17, 2017). While using the word “intentionally,” the definition also refers broadly to “wild birds” and not CMS Appendix I birds or to the CMS definition of “take.”

<sup>166</sup> *The Prevention of Illegal Killing, Taking and Trade of Migratory Birds*, *supra* note 20, ¶ 11.

<sup>167</sup> The parties would further define “taking” using their general authority to “make recommendations . . . for improving the conservation status of migratory species.” CMS, *supra* note 7, art. VII, ¶ 5(e).

<sup>168</sup> See CMS Sessional Committee of the CMS Scientific Council, ScC-SC4 CRP 2.7, 11 (2019).

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*Species and Their Migration*

Consistent with the challenges of protecting migratory species from various threats along their migration, CMS imposes wide-ranging obligations on Range States to protect the habitat and migration of Appendix I species. Article III(4) provides that Parties that are Range States “shall endeavor”:

- (a) to conserve and, where feasible and appropriate, restore those habitats of the species which are of importance in removing the species from danger of extinction;
- (b) to prevent, remove, compensate for or minimize, as appropriate, the adverse effects of activities or obstacles that seriously impede or prevent the migration of the species; and
- (c) to the extent feasible and appropriate, to prevent, reduce or control factors that are endangering or are likely to further endanger the species, including strictly controlling the introduction of, or controlling or eliminating, already introduced exotic species.<sup>169</sup>

Given the broad range of species included in Appendix I and the varied threats challenging their survival, CMS does impose an “extremely wide-ranging and onerous set of obligations” that may establish a “near-impossible burden” on Range States.<sup>170</sup> Yet, if the goal is to maintain or restore a species to a favourable conservation status, the parties must rise to the challenge of implementing these obligations. Consider the following examples:

- Sea turtles, such as the leatherback turtle (*Dermochelys coriacea*), are caught in the nets of shrimpers. Females return to the same beach each year to lay their eggs, but the beaches may be eroded or lost entirely to rising sea levels or human activities. Humans, dogs, and others take the eggs for food. Light from hotels and houses may redirect sea turtle hatchlings inland instead of towards the sea.<sup>171</sup>

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<sup>169</sup> CMS, *supra* note 7, art. III, ¶ 4.

<sup>170</sup> Caddell, *supra* note 15, at 117.

<sup>171</sup> *Leatherback Turtle: in the Spotlights*, NOAA FISHERIES: SPECIES DIRECTORY, <https://www.fisheries.noaa.gov/species/leatherback-turtle> [<https://perma.cc/6ATJ-VE7C>] (last visited Sep. 26, 2025). See generally Chris Wold, *The Status of Sea Turtles under International Environmental Law and International Environmental Agreements*, 5 J. INT’L WILDLIFE L. & POL’Y 11, 15–18 (2002) (describing threats and applicable law to sea turtles).

- The North Atlantic right whale (*Eubalaena glacialis*), despite being a marine species like the leatherback, faces very different threats. Right whales are entangled in lobster and crab fishing gear, killed by vessel strikes because they migrate along an important international shipping route, ocean noise, and adversely affected by climate change, which is altering the availability of food resources.<sup>172</sup>
- The gorilla (*Gorilla gorilla*) is poached for food, captured for pets, and hunted for trophies and medicine. In addition, its forest habitats are lost or degraded by commercial logging and for agriculture. Its populations have been reduced by a variety of infectious diseases, including Ebola.<sup>173</sup>
- The saker falcon (*Falco cherrug*) is threatened by habitat destruction and exploitation for falconry. Saker falcons are also electrocuted on medium-voltage powerlines, unintentionally poisoned by pesticides, and killed in collisions with wind turbines. Eggs and chicks are harvested illegally for pets and falconry.<sup>174</sup>

These examples highlight the challenges of implementing the obligations of Article III(4). Different habitat types must be protected, monitoring of illegal activities requires enforcement officials across a diversity of habitats, different fisheries must be regulated differently, and other *sui generis* requirements must be imposed on a species-specific basis to address threats to Appendix I species, their habitats and their migration. For these reasons, presumably, the Convention explicitly provides that Range States “shall endeavour” to implement these requirements where “feasible and appropriate” or “as appropriate.”

Given the breadth of habitats to protect and restore and the wide variety of threats to species and their migrations, it is perhaps inevitable that the unqualified obligations to protect habitats and migrations included in the draft convention presented to the parties at the

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<sup>172</sup> *North Atlantic Right Whale*, NOAA FISHERIES, <https://www.fisheries.noaa.gov/species/north-atlantic-right-whale> [https://perma.cc/FL2S-TEGY] (last visited Sept. 28, 2025).

<sup>173</sup> *Threats to Gorillas*, WORLD WILDLIFE FUND, [https://wwf.panda.org/discover/knowledge\\_hub/endangered\\_species/great\\_apes/gorillas/threats/](https://wwf.panda.org/discover/knowledge_hub/endangered_species/great_apes/gorillas/threats/) [https://perma.cc/S8GJ-KGHL] (last visited Sept 28, 2025).

<sup>174</sup> András Kovács, Colin Galbraith & Nick P. Williams, CMS, Saker Falcon *Falco cherrug* Global Action Plan (SakerGap) 32–38, 44–45 (2014).

start of the negotiations were “heavily diluted.”<sup>175</sup> Notably, the negotiating draft provided that Range States “shall” perform these obligations without any qualifying language,<sup>176</sup> with exceptions allowed only in “extraordinary circumstances.”<sup>177</sup> As with the proposed take prohibition of the negotiating text, the strictness of these obligations can be understood by the drafters’ original vision to apply them to “a limited number of species with a very unfavourable conservation status” to improve their conservation status rapidly.<sup>178</sup>

Delegations, though, believed these obligations were too strict. The United Kingdom, for example, noted that “[t]here may be cases where, with the best will in the world, effective measures will be impossible.”<sup>179</sup> As a result, it proposed adding the phrase “where possible” to all of the Article III obligations and the phrase “insofar as is practicable” to the obligation to control factors likely to influence a species’ unfavourable conservation status.<sup>180</sup> The United States, without comment, made similar proposals for all three obligations that became Article III(4).<sup>181</sup>

However, by this point in the negotiations, CMS was taking a different shape than originally intended, which might explain the introduction of the qualifying language in Article III(4). While the IUCN as the principal drafter envisaged Appendix I including as few as ten to fifteen species,<sup>182</sup> the Federal Republic of Germany had a different view, recommending about 70 species at a 1978

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<sup>175</sup> BOWMAN, DAVIES & REDGWELL, *supra* note 41, at 549 (“It is obvious that, by comparison with the obligations to control taking, these commitments [in Article III(4)] are heavily diluted.”).

<sup>176</sup> Second Revised Draft Convention, *supra* note 43, art. III, ¶ 2.

<sup>177</sup> *Id.* ¶ 3.

<sup>178</sup> Second Revised Draft Convention, *supra* note 43, at 41.

<sup>179</sup> United Kingdom Proposed Amendments, *supra* note 121, at 9.

<sup>180</sup> *Id.* at 11, 13.

<sup>181</sup> United States, Proposed Amendment of Article III, PL 10 (June 13, 1979).

<sup>182</sup> See Letter from Daniel B. Navid, Assistant Legal Officer, IUCN Env’t L. Ctr., to Tony Mence, IUCN (July 5, 1977) (on file with author) (noting that the IUCN Environmental Law Centre was “alarmed by the magnitude and composition” of the proposed list of species for inclusion in Appendix I and that “[w]e were told by scientific authorities in the Ministry that they could only envisage 10–15 species that it would be desirable to list on this Appendix”).

meeting to discuss an initial list of species for inclusion in Appendix I.<sup>183</sup> In addition, Appendix I would now include endangered species instead of those with an “unfavourable conservation status;” Appendix II would now include species with an “unfavourable conservation status.”<sup>184</sup> Clearly, Article III(4) would have a much greater impact on parties if its obligations were not qualified.

Despite the qualified nature of the obligations of Article III(4), the parties, acting collectively, have done much to implement this mandate to protect and restore habitats, remove obstacles to migration, and control threats to Appendix I species. For example:

- *SakerGap* includes a detailed framework for action for addressing the threats to saker falcons noted above. These actions include ensuring that new medium-voltage power lines are designed to avoid electrocution of falcons and existing powerlines are so modified, developing *ex situ* conservation strategies to reduce pressure on wild populations, and the mapping of areas of importance to saker falcons for protecting their habitat.<sup>185</sup> The plan also includes specific survival targets and other measures of success with means to verify whether those targets have been met and measures implemented.<sup>186</sup>
- The ambitious Sahelo-Saharan Megafauna Initiative includes species-specific action plans for nine mammal species across sixteen African States.<sup>187</sup> The action plans include directives

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<sup>183</sup> IUCN, Summary Record of Meeting of Experts to Advise on Species to Be Included in Appendices to the Convention (18–21 July 1978) (1978) (on file with author).

<sup>184</sup> *Compare* Second Revised Draft Convention, *supra* note 43, at arts. III (“Appendix I shall list migratory species selected in consequence of their unfavourable conservation status[.]”), *with* Conference to Conclude a Convention on the Conservation of Migratory Species of Wild Animals, *Proposal by the Federal Republic of Germany and Other Delegations*, DC 2 ¶ 1 (June 15, 1979) (“Appendix I shall list migratory species which are endangered.”) *and* Conference to Conclude a Convention on the Conservation of Migratory Species of Wild Animals, *Proposed Amendment of Article IV (New Draft) Submitted by the Working Group*, DC 4, ¶ 1 (June 16, 1979) (“Appendix II shall list migratory species which . . . have an unfavourable conservation status.”).

<sup>185</sup> KOVÁCS, GALBRAITH & WILLIAMS, *supra* note 174, at 68–69.

<sup>186</sup> *Id.* at 70–72.

<sup>187</sup> CMS, *Sahelo-Saharan Megafauna Initiative*, UNEP/CMS/Res. 9.21 (Rev.COP14) (2024). The initiative covers the addax (*Addax nasomaculatus*),

to strengthen legislation, restore important habitats, engage in needed scientific research, and improve enforcement of law, among many other activities that implement CMS's habitat obligations.<sup>188</sup>

- The Central Asian Mammal Initiative (CAMI) creates a program of work to conserve and manage fifteen species in fourteen Asian Range States.<sup>189</sup> As with the Sahelo-Saharan Megafauna Initiative, CAMI includes numerous activities for the parties to adopt as a means to implement CMS Article III(4), including those relating to management of livestock.<sup>190</sup>

The parties have also taken action and provided guidance to promote ecological connectivity through, *inter alia*, ecological networks and by addressing obstacles to migration that affect larger taxonomic groups.<sup>191</sup> For example, resolutions call on parties to develop measures to build power lines using medium-voltage to protect all bird species, not just saker falcons, from electrocution.<sup>192</sup> Other resolutions include guidelines for preventing poisoning of

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African wild ass (*Equus africanus*), Barbary sheep (*Ammotragus lervia*) Cuvier's gazelle (*Gazella cuvieri*), dama gazelle (*Nanger dama*), red-fronted gazelle (*Eudorcas rufifrons*), scimitar-horned oryx (*Oryx dammah*), slender-horned gazelle (*Gazella leptoceros*), and dorcas gazelle (*Gazella dorcas*) in Algeria, Burkina Faso, Chad, Egypt, Eritrea, Ethiopia, Libya, Mali, Mauritania, Morocco, Niger, Nigeria, Senegal, South Sudan, Sudan and Tunisia. *Id.* at ¶ 1.

<sup>188</sup> *Id.* at Annex.

<sup>189</sup> *Central Asian Mammal Initiative*, *supra* note 18, at 4–5. This initiative, known as CAMI, covers the argali (*Ovis ammon*), Asiatic cheetah (*Acinonyx jubatus*), Asiatic wild ass (*Equus hemionus*), Bukhara deer (*Cervus elaphus yarkandensis*), Gobi bear (*Ursos arctos isabellinus*), goitered gazelle (*Gazella subgutturosa*), kiang (*Equus kiang*), Mongolian gazelle (*Procapra gutturosa*), Persian leopard (*Panthera pardus saxicolor*), Przewalski's horse (*Equus ferus przewalskii*), saiga antelope (*Saiga spp.*), snow leopard (*Uncia uncia*), urial (*Ovis vignei*), wild camel (*Camelus bactrianus*), and wild yak (*Bos grunniens*) in Afghanistan, Bhutan, China, India, Iran, Kazakhstan, Kyrgyzstan, Mongolia, Nepal, Pakistan, Russian Federation, Tajikistan, Turkmenistan, and Uzbekistan. *Id.*

<sup>190</sup> *Id.*, at 10.

<sup>191</sup> See, e.g., CMS, *Ecological Connectivity*, *supra* note 25; CMS, *Strategic Review of Aspects of Ecological Networks relating to Migratory Species*, UNEP/CMS/COP11/Doc.23.4.1.2 (Aug. 16, 2014).

<sup>192</sup> See CMS, *Power Lines and Migratory Birds*, *supra* note 22, at pmb. ¶ 2, ¶¶ 2.5, 2.8; CMS, *Electrocution of Migratory Birds*, UNEP/CMS/Res. 7.4 (2002).

birds<sup>193</sup> and illegal killing of birds.<sup>194</sup> The parties have also developed a large body of soft law to protect marine species, including best practices guidelines relating to the live capture of cetaceans,<sup>195</sup> the identification and protection of important areas for marine mammals<sup>196</sup> and sharks,<sup>197</sup> and directives to coordinate research and reduce anthropogenic noise,<sup>198</sup> marine debris,<sup>199</sup> bycatch,<sup>200</sup> and vessel strikes.<sup>201</sup> Regarding terrestrial mammals, the parties have developed a joint project with CITES “to enhance the conservation, restoration and management of the African Wild Dog (*Lycaon pictus*), Cheetah (*Acinonyx jubatus*), Leopard (*Panthera pardus*) and Lion (*Panthera leo*), as well as their habitats and prey . . .”<sup>202</sup> The new CMS Jaguar Initiative seeks to replicate the successes of the African Carnivores Initiative.<sup>203</sup>

In the end, parties “shall endeavour” to implement these measures. Although the use of “endeavor” softens the nature of the obligation, it nonetheless imposes one.<sup>204</sup> Obligations like those

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<sup>193</sup> See CMS, *Preventing Poisoning of Migratory Birds*, UNEP/CMS/Res. 11.15 (Rev.COP14) (2024).

<sup>194</sup> See *The Prevention of Illegal Killing, Taking and Trade of Migratory Birds*, *supra* note 20.

<sup>195</sup> See CMS, *Live Capture of Cetaceans from the Wild for Commercial Purposes*, UNEP/CMS/Res. 11.22 (Rev.COP12) (2017).

<sup>196</sup> See CMS, *Important Marine Mammal Areas (IMMAs)*, UNEP/CMS/Res. 12.13 (2017).

<sup>197</sup> See CMS, *Important Shark and Ray Areas*, UNEP/CMS/Res. 14.7 (2024).

<sup>198</sup> See CMS, *Adverse Impacts of Anthropogenic Noise on Cetaceans and Other Migratory Species*, UNEP/CMS/Res. 12.14 (2017).

<sup>199</sup> See CMS, *Management of Marine Debris*, UNEP/CMS/Res. 12.20 (2017).

<sup>200</sup> See CMS, *Bycatch*, *supra* note 20.

<sup>201</sup> See CMS, *Reducing the Risk of Vessel Strikes for Marine Megafauna*, UNEP/CMS/Res. 14.5, 2 (2024).

<sup>202</sup> CMS, *Joint CITES-CMS African Carnivores Initiative*, UNEP/CMS/Res. 13.4, 2 (2020).

<sup>203</sup> See CMS, *CMS Jaguar Initiative*, UNEP/CMS/Res. 14.14 (2024).

<sup>204</sup> The High Court of Australia interpreted the phrase “shall endeavor, in so far as possible, and as appropriate for each country” under Article 5 of the World Heritage Convention as imposing an obligation. One member of the 4-3 majority on that issue, Judge Anthony Mason, wrote the following:

[Article 5] is expressed in the form of a command requiring each party to endeavour to bring about the matters dealt with in the lettered

found in CMS Article III(4)—obligations that do not guarantee a specific outcome—are “obligations of conduct” that require parties “to deploy adequate means, to exercise best possible efforts, to do the utmost” to achieve the intended result.<sup>205</sup> As expressed by the International Court of Justice, parties must exercise “due diligence” to implement such measures.<sup>206</sup> Parties have flexibility in how they

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paragraphs. Indeed, there would be little point in adding the qualifications “in so far as possible” and “as appropriate for each country” unless the article imposed an obligation. The first qualification means “in so far as is practicable” and the second takes account of the difference in legal systems. Neither of these qualifications nor the existence of an element of discretion and value judgment in par. (d) [of Article 5] is inconsistent with the existence of an obligation. There is a distinction between a discretion as to the manner of performance and a discretion as to performance or nonperformance. The latter, but not the former, is inconsistent with a binding obligation to perform. And it is only natural that in framing a command to States to take measures of the kind described in par. (d) in relation to their heritage the command will be expressed in terms of endeavour, subject to the qualifications mentioned.

*Commonwealth v. Tasmania* (1983) 158 CLR 1 (Austl.).

<sup>205</sup> Responsibilities and Obligations of States with respect to Activities in the Area, Advisory Opinion, Feb. 1, 2011, ITLOS Rep. 10, 41, ¶ 110.

<sup>206</sup> Pulp Mills on the River Uruguay (Arg. v. Uru.), Judgment, 2010 I.C.J. 14, 77, ¶ 187 (Apr. 10). The Court later added the following:

[T]he obligation to “preserve the aquatic environment, and in particular to prevent pollution by prescribing appropriate rules and measures” is an obligation to act with due diligence in respect of all activities which take place under the jurisdiction and control of each party. It is an obligation which entails not only the adoption of appropriate rules and measures, but also a certain level of vigilance in their enforcement and the exercise of administrative control applicable to public and private operators, such as the monitoring of activities undertaken by such operators, to safeguard the rights of the other party. The responsibility of a party to the 1975 Statute would therefore be engaged if it was shown that it had failed to act diligently and thus take all appropriate measures to enforce its relevant regulations on a public or private operator under its jurisdiction. The obligation of due diligence under Article 41(a) in the adoption and enforcement of appropriate rules and measures is further reinforced by the requirement that such rules and measures must be “in accordance with applicable international agreements” and “in keeping, where relevant, with the guidelines and recommendations of international technical bodies.” This requirement has the advantage of ensuring that the rules and measures adopted by the parties both have to conform to applicable international agreements and to take account of internationally agreed technical standards.

implement these types of obligations but not whether they do. Moreover, “the standard of due diligence varies depending on the particular circumstances to which the obligation of due diligence applies.”<sup>207</sup> As the International Tribunal on the Law of the Sea recently stated in the context of duties to combat climate change under the UN Convention on the Law of the Sea, those circumstances include “scientific and technological information, relevant international rules and standards, the risk of harm and the urgency involved[,]” as well as a State’s capabilities and available resources.<sup>208</sup> Given the varied threats to Appendix I species and the dire conservation status for many of them, a high standard of due diligence is called for to achieve the objectives of CMS.

Regardless, CMS and its parties have moved aggressively to implement the habitat obligations of Article III(4). Significantly, a party’s implementation of Article III(4) is subject to the Convention’s compliance mechanism, known as the Review Mechanism.<sup>209</sup> Given the nature of due diligence obligations, it may be difficult to determine whether a party is non-compliant. Nonetheless, a party’s activities can be reviewed and support provided to facilitate more effective implementation.<sup>210</sup>

### C. *Developing Agreements for Appendix II and Other Species*

From the early drafting days of CMS, the development of Agreements for migratory species was intended to be the Convention’s cornerstone. A species’ inclusion in Appendix I was meant to achieve rapid conservation gains until a free-standing Agreement with institutions distinct from CMS could be developed to provide long-term conservation and management to the species. Over time, however, CMS parties have seen this approach as cost-intensive.

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*Id.* at ¶ 197.

<sup>207</sup> Request for an Advisory Opinion Submitted by the Commission of Small Island States on Climate Change and International Law, Case No. 31, Advisory Opinion, 86, ¶ 239 (May 21, 2024).

<sup>208</sup> *Id.* at ¶ 239, 241.

<sup>209</sup> See CMS, *Establishment of a Review Mechanism and a National Legislation Programme*, UNEP/CMS/Res. 12.9, at 2 (2017).

<sup>210</sup> The parties adopted a “supportive, non-adversarial and facilitative approach” to compliance review that allows the provision of assistance to non-complying parties but no sanctions beyond a written caution. *Id.* at 2, 4.

After a brief period during which the parties negotiated several Agreements, the parties paused the creation of new Agreements. Instead, the focus now appears to be on the creation of action plans and initiatives, such as those for African Carnivores and CAMI. The substantive content of these action plans and initiatives is essentially the same as of Agreements. The primary difference is the burden placed on the Secretariat because the goal for each Agreement to adopt its own institutions, including a Secretariat and scientific body, never materialized. Instead, the CMS Secretariat administers most memoranda of understanding (MOUs), action plans, and initiatives. Without significant increases to the Secretariat's budget, it is difficult to see how this approach will succeed across a broad spectrum of the more than 1,000 Appendix II species.<sup>211</sup> This section traces the negotiators' and parties' evolving thoughts on Agreements, examines the reasons why Agreements have succeeded or failed, and explores the current emphasis on action plans and initiatives.

### 1. The Negotiating History

Several scholars have noted that the success of CMS rests with the negotiation and implementation of Agreements for Appendix II species since the Convention does not apply the prohibition against take and other obligations to them.<sup>212</sup> The Convention's negotiating history supports this view. In fact, the second draft of the Convention from August 1974, prepared by the IUCN, provides that the Parties "shall take action to bring into being Agreements covering *all* migratory species."<sup>213</sup> Similarly, the Explanatory Notes to a 1975 draft state that the goal of the Convention is to ensure that all migratory species are covered by an Agreement.<sup>214</sup> As the draft Convention did not include appendices at this point, it is clear that the IUCN

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<sup>211</sup> See DAVIS ET AL., *supra* note 1, at 3.

<sup>212</sup> BOYLE & REDGWELL, *supra* note 16, at 658 ("[T]he success of . . . CMS depends . . . on [conclusion of Agreements] . . . ."); BOWMAN DAVIES & REDGWELL, *supra* note 41, at 554 (noting the "central role" of agreements for Appendix II species); Caddell, *supra* note 15, at 155–56 (highlighting the importance of successful implementation of agreements).

<sup>213</sup> Draft P.4, *supra* note 42, art. III, ¶ 1 (emphasis added).

<sup>214</sup> IUCN, Explanatory Notes on Draft (February 1975) of Proposed Convention on the Conservation of Migratory Species of Wild Fauna, 4 (Feb. 1975).

meant all migratory species, provided they met the broad definition of “migratory species.”<sup>215</sup>

In July 1976, the IUCN and the Federal Republic of Germany convened a group of governmental and non-governmental experts to discuss the draft convention.<sup>216</sup> Many concluded that the goal of preparing Agreements for all migratory species was too ambitious and not politically realistic.<sup>217</sup> As a consequence, the drafters abandoned the goal of developing Agreements for all migratory species. By 1977, the draft Convention included appendices for listed species, which clearly indicated that only those species meeting certain criteria would be covered by the Convention and potentially subject to an Agreement.<sup>218</sup> Nonetheless, the emphasis on concluding Agreements did not wane. The Explanatory Notes from 1977 describe the conclusion of Agreements as the “main purpose” of the Convention because the provisions of Article III “will not be sufficient to improve the conservation status of a species listed in Appendix I.”<sup>219</sup>

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<sup>215</sup> At this point, the definition of “migratory species” included all migratory species except those that migrated wholly within the borders of a single State or wholly within the high seas. Draft P.4, *supra* note 42, art. 1(a) (defining “migratory species” as “a species of wild vertebrate, crustacean or mollusc all or some members of which may at some season cross any border between the territory of one State and either that of another State or the high seas during their migration cycle ...”).

<sup>216</sup> See Summary Report of the Meeting of Experts 6–9 July 1976, 7 (1976).

<sup>217</sup> See Summary Report of the Meeting of Experts 6–9 July 1976, 44 (1976) (stating that “[s]everal comments maintained that the present draft is over-ambitious and that it will be difficult to negotiate and operate the numerous general and specific Agreements envisaged.”) [Summary Report of the 1976 Meeting of Experts]. The United Kingdom, which believed that covering all migratory species was “over-ambitious” and that it would be “extremely difficult to negotiate the kind of elaborate and specific agreements over a wide range of species.” Letter from M. I. Rothwell, UK Science and Technology Department, to Dr. W. Dünwal (Mar. 11, 1976).

<sup>218</sup> First Revised Draft Convention, *supra* note 43, arts. III, IV.

<sup>219</sup> The full quote is perhaps more illuminating:

Although the main purpose of the Convention is to promote the conclusion of agreements for the conservation and management of migratory species, it is recognized in Article III that certain species require stringent conservation measures which should be implemented immediately. . . . It is anticipated that in many cases, measures provided for in Article III will not be sufficient to improve the conservation status of a species

In fact, in 1977 the drafters explained that they envisaged the deletion of a species from Appendix I after Range States negotiated an Agreement for that species.<sup>220</sup> The IUCN, which worked on the early drafts of the Convention with governmental officials from the Federal Republic of Germany, argued that a species should automatically be removed from Appendix I after the conclusion of an Agreement, believing that this would incentivize the conclusion of Agreements and that Agreements “could not function properly if the Appendix I provisions were still in force.”<sup>221</sup> Other negotiators apparently disagreed; subsequent drafts never incorporated the IUCN’s recommendation.

The importance of Agreements to the success of CMS is also highlighted by the requirement, found in many drafts of the Convention, for all Range States to conclude Agreements.<sup>222</sup> When the Federal Republic of Germany submitted a revised draft Convention in 1977 for comment, it received significant pushback on this requirement.<sup>223</sup> Later drafts reframed this requirement, providing that parties “shall take action with a view to concluding an Agreement . . . .”<sup>224</sup> The adopted Convention softens the duty even further by

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listed in Appendix I. Accordingly, a species listed in that Appendix may eventually be listed in Appendix II with a view to the negotiation of an Agreement to provide for common conservation action by listed Range States.

Explanatory Notes on Revised Draft of the Convention on the Conservation of Migratory Species of Wild Animals, 39 (Aug. 5, 1977) [hereinafter August 1977 Explanatory Notes]; Explanatory Notes on Revised Draft of the Convention on the Conservation of Migratory Species of Wild Animals, 3 (July 25, 1977) [hereinafter July 1977 Explanatory Notes].

<sup>220</sup> August 1977 Explanatory Notes, *supra* note 219, at 39–40; July 1977 Explanatory Notes *supra* note 219, at 4.

<sup>221</sup> Notes on Revision of Draft R.1, 1 (Dec. 1976).

<sup>222</sup> See First Revised Draft Convention, *supra* note 43, art. IV, ¶ 5 (“Parties that have been added to the list of Range States . . . shall either accede to the Agreement in question or negotiate an amendment Agreement with the parties to that Agreement.”).

<sup>223</sup> See, e.g., Letter from W.B. McCleary, First Secretary Agriculture, United Kingdom, to Herr von Hegel, ¶ B.2 (Feb. 1, 1978) (stating that the apparent requirement to make Agreements “mandatory . . . is quite unacceptable”).

<sup>224</sup> Second Revised Draft Convention, *supra* note 43, art. IV, ¶ 2.

providing that Parties that are Range States “shall endeavour to conclude AGREEMENTS where these would benefit the species . . .”<sup>225</sup>

During all of this debate concerning the nature of the obligation to conclude Agreements, none of the drafts or the explanatory notes indicated whether the Agreements would be legally binding or not. Some negotiators thought that Agreements should have the same legal status as the Convention itself.<sup>226</sup> The word “international” was then added to the definition of “Agreement”<sup>227</sup> but subsequent Explanatory Notes do not describe what that adjective added to the definition.<sup>228</sup> Others thought the Convention should be an “umbrella” agreement that would provide basic commitments and that governments could negotiate within this framework “the form of agreement most appropriate to the particular problems posed by that species.”<sup>229</sup>

However, the drafts did include a provision stating that each Agreement required a commission and scientific council that would be entrusted with implementation of an Agreement.<sup>230</sup> That is, Agreements would not be supported by the CMS Secretariat and Scientific Council. At a 1976 Experts Meeting, several participants voiced concern about the “possible proliferation of Commissions and Committees.”<sup>231</sup> Nonetheless, several drafts later, provisions

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<sup>225</sup> CMS, *supra* note 7, art. IV, ¶ 3.

<sup>226</sup> See Summary Report of the 1976 Meeting of Experts, *supra* note 217, at 63 (noting that “[s]everal comments propose that it be made clear that the Agreements are International Agreements having the same status as the Convention itself. To this end, one suggestion is that the word ‘international’ be inserted before ‘Agreement.’”).

<sup>227</sup> Compare Draft of the Convention on the Conservation of Migratory Species of Wild Animals, art. I.1(j), Feb. 1975 [hereinafter February 1975 Draft], with Revised Draft of the Convention on the Conservation of Migratory Species of Wild Animals, art. I, Dec. 1976 (changing the definition of “Agreement” to mean “an *international* agreement relating to the conservation and management of one or more migratory species . . .”) (emphasis added).

<sup>228</sup> See, e.g., Explanatory Notes to the Draft of the Convention on the Conservation of Migratory Species of Wild Animals (June 8, 1977) (providing no explanation for the change in the definitions or agreements sections of the Explanatory Notes).

<sup>229</sup> Summary Report of the 1976 Meeting of Experts, *supra* note 217, at 44.

<sup>230</sup> See, e.g., February 1975 Draft, *supra* note 227, art. VIII.

<sup>231</sup> See Summary Report of the 1976 Meeting of Experts, *supra* note 217, at 81.

requiring a commission and scientific body for each agreement remained.<sup>232</sup> In fact, the negotiators never considered the CMS Secretariat to be the entity to administer Agreements. During the final negotiating session, the text never changed with respect to the Secretariat's role with Agreements; it would promote their development and make a list of them available to the parties, but it would not administer them.<sup>233</sup>

By the time the delegations arrived in Bonn for the final negotiating session in June 1979, the draft Convention still did not include any conservation criteria for including species in Appendix II and did not distinguish AGREEMENTS for Appendix II migratory species from agreements for other migratory species.<sup>234</sup> Based on proposals from the United States, CMS took the shape it now has: Appendix I would be reserved for "endangered species,"<sup>235</sup> Appendix II would include species that require "international agreements" and that have "an unfavourable conservation status or a conservation status that could be achieved by an international agreement," and agreements could be developed for geographically separate populations or lower taxa of migratory species "if such agreement would enhance [their] conservation status."<sup>236</sup> The U.S. proposal was refined by including in Appendix II those species that would significantly benefit from an international cooperation to be achieved by an international agreement, but the distinction remained between "international agreements" for Appendix II species and "agreements" for non-migratory species not included in Appendix II.<sup>237</sup> That later became AGREEMENTS, defined as an "international agreement," for Appendix II species and "agreements" for species that do not meet the CMS definition for "migratory

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<sup>232</sup> See, e.g., Revised Draft of Proposed Convention on the Conservation of Migratory Species of Wild Animals, art. V, ¶ 4 (June 8, 1977).

<sup>233</sup> See Conference to Conclude a Convention on the Conservation of Migratory Species of Wild Animals, *Final Act of the Conference to Conclude the Convention on the Conservation of Migratory Species of Wild Animals*, art. IX (June 17, 1979); CMS, *supra* note 7, art. IX, ¶ 4(g)-(h).

<sup>234</sup> See *id.* art. IV.

<sup>235</sup> United States, PL 10, *supra* note 181.

<sup>236</sup> United States, Proposed Amendment of Article IV, PL 11, ¶¶ 2, 6 (June 13, 1979).

<sup>237</sup> RT 5, *supra* note 135, art. IV.

species.”<sup>238</sup> If the negotiators intended some distinction in the legal character between AGREEMENTS as “international agreements” in Article IV(3) and agreements in Article IV(4), it is not recorded in the negotiating history.

## 2. The Interpretation of Agreements in the Convention’s Early Years

Through the first meetings of the Conference of the Parties, the parties began to develop particular views on how to implement Articles IV(3) AGREEMENTS for Appendix II species and IV(4) agreements for species that “periodically” cross national boundaries but which do not meet the Convention’s definition of “migratory.” For example, many parties and scientific experts believed that the Secretariat should provide administrative support for AGREEMENTS,<sup>239</sup> even though the Convention gives the Secretariat no such role.<sup>240</sup> According to the Secretariat, if the Secretariat were to administer AGREEMENTS, then the Parties to the AGREEMENTS needed to provide financial support to the Secretariat;<sup>241</sup> funds from the core CMS budget would be inadequate

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<sup>238</sup> CMS, *supra* note 7, arts. I, ¶ 1(j), IV, ¶ 3–4. The decision to use AGREEMENT wherever Agreement is found is recorded in the minutes from June 21, 1979 and recorded in Working Draft No. 2, which was adopted by the negotiators. Conference to Conclude a Convention on the Conservation of Migratory Species of Wild Animals, SumPI 12, ¶ 1 (June 21, 1979); Conference to Conclude a Convention on the Conservation of Migratory Species of Wild Animals, *Working Draft No. 2, Vol. 1, FINAL 1*, art. 1(1)(j) (June 22, 1979); SumPI 14, *supra* note 48, at 3.

<sup>239</sup> See Memorandum from CMS Secretariat on Administrative Support for AGREEMENTS, CMS/CONF.2.15.4, ¶ 1 (July 12, 1988) (on file with author) (stating that “[d]uring consultations on the development of the AGREEMENTS specified in resolution 1.6 adopted at the first meeting of the Conference of the Parties, many government officials and scientific experts have expressed the view that administrative support for these AGREEMENTS should be provided by the Conference Secretariat, rather than by independent administrative and advisory support machinery established for the purpose.”).

<sup>240</sup> *Id.*

<sup>241</sup> *Id.* (stating that “it is not appropriate that [the Secretariat] should simply take on responsibility for providing administrative support for AGREEMENTS without supplementary contributions from parties to these AGREEMENTS, at least in the longer term.”).

because at the time many potential parties to an AGREEMENT were not CMS parties.<sup>242</sup>

In addition, the Convention's definition of AGREEMENT created some confusion that required clarification. The Convention defines an "AGREEMENT" to mean "an international agreement relating to the conservation of one or more migratory species as provided for in Articles IV and V of this Convention."<sup>243</sup> The definition's use of the word "international" does not make clear whether "international" refers to any agreement with two or more parties and thus included bilateral and regional agreements or whether it refers to agreements having broad geographic scope. Second, it is not clear whether the term "international agreement" refers to a legally-binding agreement consistent with the Vienna Convention on the Law of Treaties.<sup>244</sup> France commented that AGREEMENTS "should be flexible and they should not require ratification,"<sup>245</sup> suggesting that AGREEMENTS need not be legally binding. Others disagreed, believing that AGREEMENTS and agreements must be legally binding.<sup>246</sup> As a consequence, the Secretariat recommended that "interim conservation measures," such as the non-legally binding

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<sup>242</sup> The Secretariat's paper notes that for the proposed AGREEMENT for *Ciconia c. ciconia*, only 23 of the 77 Range States were Parties to the Convention. *Id.* at 5.

<sup>243</sup> CMS, *supra* note 7, art. I, ¶ 1(j).

<sup>244</sup> VCLT, *supra* note 116, art. 2, ¶ 1(a) (defining "treaty" to mean "an international agreement concluded between States in written form and governed by international law, whether embodied in a single instrument or in two or more related instruments and whatever its particular designation").

<sup>245</sup> CMS, *Proceedings of the Second Meeting of the Conference of the Parties*, UNEP/CMS/Conf.2.16, ¶ 26 (1988).

<sup>246</sup> For example, Barbara Lausche, an attorney, states in her history of the Convention that "legally-binding agreements would be needed to trigger actions required for specific species" included in Appendix II. See BARBARA J. LAUSCHE, WEAVING A WEB OF ENVIRONMENTAL LAW: CONTRIBUTIONS OF THE IUCN ENVIRONMENTAL LAW PROGRAMME 173, 310 (2008). She calls the MOU approach adopted in Resolution 2.6 "a legal technique not provided for by the Convention text." *Id.* at 175. Writing during the early years of the Convention, one author stated that "[o]ne obstacle has been the *apparent* need for AGREEMENTS to go through a formal ratification process, and a number of countries have expressed reservations about the prospect of asking their Parliaments to go through the full treaty ratification exercise for an AGREEMENT on European bats or white storks." Lyster, *The "Bonn Convention," supra* note 13, at 992 (emphasis added).

memorandum of understanding on small cetaceans signed in 1990, provided a possible way forward.<sup>247</sup>

By COP2 in 1989, the parties started addressing these issues. First, by acknowledging that “[t]he conclusion of *regional* agreements has proved to be more difficult than expected,”<sup>248</sup> they signaled that the word “international” did not require a broad geographic scope.

Second, the parties adopted Resolution 2.6 which provided that agreements under Article IV(4) “may take the shape of, for example, . . . administrative agreements or memoranda of understanding” and that such agreements may be a “first step” towards an AGREEMENT.<sup>249</sup> The parties qualified this statement at COP3 in Resolution 3.5 by saying that agreements under Article IV(4) could be “a first step” towards conclusion of an Article IV(3) AGREEMENT but that “in other cases this may not be appropriate.”<sup>250</sup> Even with this qualification, the significance of these statements is clear: Article IV(4) agreements can be non-binding, but Article IV(3) AGREEMENTS, implicitly, would be binding; a two-step process would not be necessary unless the steps included some distinction in the legal status of agreements and AGREEMENTS.

Third, Resolution 2.6 implicitly recognized that Article V(2) provides that “[e]ach AGREEMENT should cover the whole of the range of the migratory species concerned” and be open to all Range States regardless of whether they are party to CMS, but that neither Article IV nor Article V directly states what the geographic scope

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<sup>247</sup> CMS, *Measures under Article IV of the Convention*, UNEP/CMS/Conf.3.14.3, ¶ 2 (June 11, 1991) (on file with author).

<sup>248</sup> Report on the Work of the Standing Committee, CMS/Conf.2.12.1, ¶ 24 (1988) (emphasis added) (on file with author).

<sup>249</sup> CMS, *Implementation of Articles IV and V of the Convention*, UNEP/CMS/Res. 2.6, ¶¶ 2–3 (1988). *Proceedings of the Second Meeting of the Conference of the Parties*, *supra* note 237, at 32, Res. 2.6, (1988). This clarification is now included in Res. 12.8. See UNEP/CMS/Res. 12.8, *supra* note 81, ¶¶ 4, 7.

<sup>250</sup> CMS, *Implementation of Article IV, Paragraph 4, of the Convention concerning Agreements*, UNEP/CMS/Res. 3.5, ¶ 4 (1993), in CMS, *Proceedings of the Third Meeting of the Conference of the Parties to the Convention on the Conservation of Migratory Species of Wild Animals*, UNEP/CMS/Conf.3.21, 22 (1991) This clarification is now included in Res. 12.8. See *Implementation of Articles IV and V of the Convention*, *supra* note 81, ¶ 7.

should be of an agreement under Article IV(4).<sup>251</sup> Thus, the resolution clarifies that Article V(2) of the Convention “should apply also to such instruments.”<sup>252</sup>

Resolution 2.7 separately addressed the question of administering Agreements. Within the framework of achieving “the most efficient, economical and appropriate administration and co-ordination” of Agreements, it provided that a party, a national or international organization, or the CMS Secretariat may administer an agreement.<sup>253</sup> These clarifications of Resolutions 2.6, 2.7, and 3.5, now consolidated in Resolution 12.8, make clear that agreements can include non-Appendix II species and non-CMS parties, should cover the whole range of the species, take a variety of legal forms, and lead to a binding agreement under Article VI(3).<sup>254</sup>

### 3. The Implementation of Agreements

After a “disappointing” slow start, with no Agreements developed in CMS’s first six years,<sup>255</sup> the parties negotiated three Agreements in the early 1990s and 23 Agreements between 1999 and

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<sup>251</sup> CMS, Res. 2.6, *supra* note 249, at pmb1, para. 1, ¶ 1.

<sup>252</sup> *Id.* ¶ 3. Res. 3.5 extended to Agreements other provisions that CMS applies only to AGREEMENTS, including Article VII(5)(d) directing the parties to consider reports concerning AGREEMENTS and Article IX(4)(b) and (h), directing the Secretariat to liaise with the institutional bodies of AGREEMENTS and to provide information on AGREEMENTS if asked by the parties. CMS Res. 3.5, *supra* note 250, ¶ 2. This clarification is now included in Resolution 12.8. See UNEP/CMS/Res. 12.8, *supra* note 74, ¶ 4.

<sup>253</sup> CMS, *Administration of Agreements*, UNEP/CMS/Res. 2.7, ¶ 1 (1988), in *Proceedings of the Second Meeting of the Conference of the Parties*, *supra* note 237, at 33. This clarification is now included in Resolution 12.8. See *Implementation of Articles IV and V of the Convention*, *supra* note 81, ¶ 12.

<sup>254</sup> *Implementation of Articles IV and V of the Convention*, *supra* note 81, ¶¶ 4, 6, 7.

<sup>255</sup> See *Proceedings of the Second Meeting of the Conference of the Parties*, *supra* note 245, ¶ 9 (Acting UNEP Assistant Administrator, A.T. Brough, “felt obliged to state candidly that progress towards conclusion of AGREEMENTS had been disappointing. This was due not only to the limited resources given to the Secretariat. There was an apparent lack of interest and even, regrettably, of co-operation on the part of Party Range States.”).

2010.<sup>256</sup> Since then, concerns about how to fund such Agreements and a “perceived proliferation” of them has led the parties to essentially pause the negotiation of new ones;<sup>257</sup> they have not adopted a new Agreement since the end of 2010.<sup>258</sup>

These 26 Agreements concluded under Article IV have different legal statuses, institutional structures, and conservation successes.<sup>259</sup> For example, seven of these Agreements are legally binding, with four concluded under Article IV(3) and three under Article IV(4).<sup>260</sup> In addition, the parties have negotiated nineteen non-

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<sup>256</sup> These data are found by reviewing the CMS website <https://www.cms.int/cms-instruments/agreements> [<https://perma.cc/6BYS-R37C>].

<sup>257</sup> CMS, *Implementation of Existing CMS Instruments*, UNEP/CMS/COP11/Doc.22.1, ¶ 4 (2014). The chair of the Scientific Council noted at COP4 in 1994 that the Council had prepared a list of 30 potential Agreements, although the chair acknowledged that working on so many Agreements at once would be challenging. See CMS, *Proceedings of the Fourth Meeting of the Conference of the Parties*, UNEP/CMS/Conf.4.16, ¶ 55 (1994).

<sup>258</sup> One recent effort to draft a new Agreement involved the critically endangered European eel, a species that migrates from the Sargasso Sea to coastal and freshwater river habitats in Europe and northern Africa. After three meetings, the participating Range States decided that it was “premature” to discuss an Agreement under CMS for the species. CMS, *Report of the Meeting of the Third Meeting of the Range States for the European Eel*, UNEP/CMS/Eels3/Report, ¶ 88 (2019). For an assessment of the effort, see Chris Wold, *Bringing the European Eel Back from the Brink: The Need for a New Agreement under the Convention on Migratory Species*, 35 PACE ENV'T. L. 168, 168 (2018).

<sup>259</sup> See generally UNEP/CMS Secretariat, *Developing, Resourcing and Servicing CMS Agreements: A Policy Approach*, UNEP/CMS/COP11/Doc.22.2 (2014) (describing the 26 Agreements). See also CMS, *Intersessional Process Regarding the Future Shape of CMS*, UNEP/CMS/Res. 9.13, Preamble, para. 9 (2008) (acknowledging that the growth in Agreements creates “new challenges” for CMS that requires “in-depth consideration”); CMS, *Priorities for CMS Agreements*, UNEP/CMS/Res. 10.16, ¶ 6 (2011) (recognizing that the “development of agreements are subject to the availability of resources”). The parties repealed these two resolutions in 2017 because the work outlined in them had been completed. See CMS, *Review of Decisions*, UNEP/CMS/COP12/Doc. 21/Rev. 2, annex 2, at 22–24 (2017). For a review of the similarities and differences among the Agreements, see Chris Wold, *Bringing the European Eel Back from the Brink: The Need for a New Agreement under the Convention on Migratory Species*, 35 PACE ENV'T. L. REV. 168, 192–99 (2018).

<sup>260</sup> The four Agreements concluded under Article IV(3) are Agreement on the Conservation of Gorillas and Their Habitats, Oct. 26, 2007, 2545 U.N.T.S. 55

binding MOUs, all under Article IV(4).<sup>261</sup> The CMS Secretariat administers seventeen of the nineteen MOUs, with two of them (Raptors and Dugongs) run out of the CMS office in Abu Dhabi.<sup>262</sup> Two MOUs (Ruddy-headed Goose and South Andean Huemul) are managed by the two signatories (Argentina and Chile).<sup>263</sup>

Some conclusions and observations can be made about the development and implementation of Agreements. First, although the parties have concluded far more non-binding agreements than binding Agreements, this is not cause for concern. In fact, non-binding MOUs might be preferable to binding Agreements because they are less formal, do not require formal domestic ratification processes as a pre-condition for entry into force, and can be negotiated and signed by officials with expertise in wildlife conservation.<sup>264</sup> As such, they can be developed and concluded more quickly. Moreover, like binding Article IV Agreements, MOUs should include the entire range of the species and may include non-CMS Range

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[hereinafter Gorilla Agreement]; Agreement on the Conservation of Albatrosses and Petrels, June 19, 2001, 2258 U.N.T.S. 257 (entered into force Feb. 1, 2004) [hereinafter ACAP]; Agreement on African-Eurasian Migratory Waterbirds, Aug. 15, 1996, 2365 U.N.T.S. 203 (entered into force Nov. 1, 1999) [hereinafter AEWa]; and Agreement on the Conservation of Bats in Europe, Dec. 4, 1991, 1863 U.N.T.S. 101 (entered into force Jan. 16, 1994) [hereinafter EUROBATS]. The three concluded under Article IV(4) are the Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area, Nov. 24, 1996, 2183 U.N.T.S. 303 (entered into force June 1, 2001) [hereinafter ACCOBAMS]; [hereinafter EUROBATS]; Agreement on the Conservation of Small Cetaceans of the Baltic and North Seas, Mar. 17, 1992, 1772 U.N.T.S. 217 (entered into force Mar. 29, 1994) [hereinafter ASCOBANS]; and Agreement on the Conservation of Seals in the Wadden Sea, Oct. 16, 1990, 2719 U.N.T.S. 263 (entered into force Oct. 1, 1991) [hereinafter Wadden Sea Seals].

<sup>261</sup> Links to all of these agreements can be found at *Memoranda of Understanding*, CMS, <https://www.cms.int/en/cms-instruments/mou> [<https://perma.cc/6BYS-R37C>].

<sup>262</sup> CMS Secretariat, *An Assessment of MOUs and their Viability*, UNEP/CMS/COP11/Doc. 22.3, 21 (2014) [hereinafter *An Assessment of MOUs*].

<sup>263</sup> *Implementation of Existing CMS Instruments*, *supra* note 248, ¶ 3.

<sup>264</sup> Hykle, *supra* note 14, at 116–17; Lyle Glowka, *Complementarities between the Convention on Migratory Species and the Convention on Biological Diversity*, 3 J. INT'L WILDLIFE L. & POL'Y 205, 215, (2000); Ralph Osterwoldt, *Implementation and Enforcement Issues in the Protection of Migratory Species*, 29 NAT. RESOURCES J. 1017, 1039–40 (1989).

States.<sup>265</sup> In all, CMS embraces a “pragmatic approach” that “expedites conservation action.”<sup>266</sup>

Second, despite the recommendation in Article V to include the entire range of a species, Agreements sometimes do not. For example, the Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA), an Article IV(3) AGREEMENT, does not cover the entire range of all 255 waterbirds covered by AEWA.<sup>267</sup> Similarly, the Wadden Sea Seals Agreement, an Article IV(4) agreement, does not cover the entire range of the common seal.

Third, Agreements do not always include all Range States that are Parties to CMS. These include AEWA<sup>268</sup> and the Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic area (ACCOBAMS).<sup>269</sup>

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<sup>265</sup> *Implementation of Articles IV and V of the Convention*, *supra* note 81, ¶ 4.

<sup>266</sup> Glowka, *supra* note 264, at 213. *See also* Claire Shine, *Selected Agreements Concluded Pursuant to the Convention on the Conservation of Migratory Species of Wild Animals*, in COMMITMENT AND COMPLIANCE: THE ROLE OF NON-BINDING NORMS IN THE INTERNATIONAL LEGAL SYSTEM, 196, 204 & 206 (Dinah Shelton ed., 2000) (with MOUs, the parties chose speed, flexibility, and simplicity). For more on the relative strengths and weaknesses of binding versus non-binding Agreements in the CMS context, *see* Elizabeth A. Baldwin, *Twenty-Five Years under the Convention on Migratory Species: Migration Conservation Lessons from Europe*, 41 ENV'T. L. 535, 544 (2011) (non-binding MOUs provide a “degree of flexibility” but allow parties to avoid fulfilling their conservation and financial commitments); Robert Lee et al., *Review of the Current Organization and Activities of CMS and the CMS Family: First Step of the Inter-Sessional Future Shape Process*, UNEP/CMS/Inf.10.14.8. 63, tbl. 35 (2010) (providing a detailed list of advantages and disadvantages).

<sup>267</sup> AEWA defines “waterbirds” to mean “those species of birds that are ecologically dependent on wetlands for at least part of their annual cycle, have a range which lies entirely or partly within the Agreement Area and are listed in Annex 2 to this Agreement.” AEWA, *supra* note 260, art. I.2(c) (emphasis added).

<sup>268</sup> Austria, for example, is a Party to CMS but not to AEWA. *See Parties and Range States*, AGREEMENT ON THE CONSERVATION OF AFR.-EURASIAN MIGRATORY WATERBIRDS, <http://www.unep-aewa.org/en/parties-range-states> [<https://perma.cc/94FL-TDU9>] (last visited Nov. 12, 2025).

<sup>269</sup> Israel, for example, is a Party to CMS but not to ACCOBAMS. *See Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area*, CONVENTION ON THE CONSERVATION OF MIGRATORY SPECIES OF WILD ANIMALS, <http://www.cms.int/en/legalinstrument/accobams> [<https://perma.cc/N3LY-YPJN>] (last visited Nov. 12, 2025).

Fourth, Agreements sometimes include non-Parties to CMS. For example, the United States is a signatory to the *Memorandum of Understanding on the Conservation and Management of Marine Turtles and their Habitats of the Indian Ocean and South-East Asia* (IOSEA)<sup>270</sup> and the Memorandum of Understanding on the Conservation of Migratory Sharks.<sup>271</sup> In fact, IOSEA includes more than ten non-CMS parties.<sup>272</sup>

Fifth, while some Agreements have their own budgets and staff, including ACAP, AEWA, EUROBATS, and Wadden Seals, nineteen of the twenty-six Agreements are administered by the Secretariat.<sup>273</sup> As noted above, this reliance on the Secretariat to administer agreements was not envisaged by the drafters of the Convention.<sup>274</sup> Nonetheless, reliance on the Secretariat to administer Agreements quickly became standard practice and, early on, led to resource constraints within the Secretariat. As reflected in *Developing, Resourcing and Servicing CMS Agreements—A Policy Approach*<sup>275</sup> and *An Assessment of MOUs and their Viability*,<sup>276</sup> this continues to present a problem because most MOUs “do not have predictable resource streams.”<sup>277</sup> Previously, the Secretariat had an

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<sup>270</sup> See CMS, Signatories and Range States, <https://www.cms.int/iosea-turtles/en/signatories-range-states> [<https://perma.cc/QD2Z-3ADT>].

<sup>271</sup> See CMS, Sharks, <http://www.cms.int/en/legalinstrument/sharks> [<https://perma.cc/PJU4-H8F3>].

<sup>272</sup> See CMS, Signatories and Range States, <https://www.cms.int/iosea-turtles/en/signatories-range-states> [<https://perma.cc/QD2Z-3ADT>].

<sup>273</sup> Of the MOUs, the Ruddy-headed Goose and Huemul MOUs are administered by the signatories (Argentina and Chile) with all others administered by the Secretariat. See *An Assessment of MOUs*, *supra* note 262, at 21–23. In addition, ASCOBANS and the Gorilla Agreement are administered by the CMS Secretariat in Bonn, although the Gorilla Agreement does not have a budget. The remaining binding agreements have their own Secretariats.

<sup>274</sup> See *supra* notes 231–33 and accompanying text.

<sup>275</sup> *Developing, Resourcing and Servicing CMS Agreements*, *supra* note 259.

<sup>276</sup> *An Assessment of MOUs*, *supra* note 262.

<sup>277</sup> *Id.* at 25. Echoing many of these conclusions in the context of Article IV(4), Lyle Glowka, formerly a member of the CMS Secretariat, wrote:

Article IV(4) has five practical implications. First, targeted legally binding agreements can be developed and concluded tailored to the specific needs of individual or groups of migratory species. Second, under this category of agreement, the geographic coverage does not have to extend

Agreements Unit, and the budget included a line item for developing and implementing of MOUs.<sup>278</sup> However, since COP11 in 2014, the budget has not included specific funding for developing and implementing MOUs, and the Agreements Unit was restructured into three taxa teams bearing the same responsibility for implementing the MOUs.<sup>279</sup>

#### 4. The Conservation Impact of Agreements

The success of Agreements is as varied as their structures. One important conclusion from a review of Agreements is that the legal status of the Agreement is unrelated to its conservation success.<sup>280</sup> In a review of nineteen MOUs and the Gorilla Agreement, the Secretariat concluded that MOUs were more likely to be viable when:

- the Signatories are willing and able to run it themselves (the number of Signatories must be small);
- there is a strong engagement from the stakeholders in the MOU and some modest and regular funding to assist them;
- or
- significant funding is available to staff a functional Secretariat.<sup>281</sup>

With respect to the second point—strong engagement of stakeholders—it is not the total number of stakeholders engaged but rather the level of engagement of stakeholders that is crucial. The Saiga Antelope and IOSEA MOUs have rather small numbers of signatories

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to the whole migration range of the species concerned. Third, the species covered does not have to be listed in Appendix II. Fourth, the species does not even have to fall within the narrow definition of “migratory.” Fifth, the basis has been provided to develop new administrative-types of agreements called memoranda of understanding (MOU).

Glowka, *supra* note 264, at 214.

<sup>278</sup> See CMS, *Financial and Administrative Matters and Terms of Reference for the Administration of the Trust Fund*, UNEP/CMS/Res. 8.3, Annex I, at 3 (2005); See also *Financial and Administrative Matters and Terms of Reference for the Administration of the Trust Fund of the Convention for the Conservation of Migratory Species of Wild Animals*, UNEP/CMS/Res. 9.14, Annex I, at 222 (2008) (budgeting for an Agreements Development Officer); (budgeting for a Policy and Agreements Unit).

<sup>279</sup> See CMS, *Financial and Administrative Matters*, UNEP/CMS/Res. 14.2 (2024).

<sup>280</sup> Lee et al., *supra* note 266, ¶ 193.

<sup>281</sup> *An Assessment of MOUs*, *supra* note 262, at 39.

but they all actively participate.<sup>282</sup> The Bukhara Deer MOU initially was successful because a committed regional NGO, WWF Russia, engaged with Range States to ensure that the MOU's conservation measures were implemented.<sup>283</sup>

One key difference between binding and non-binding agreements, though, is that binding agreements require parties to submit financial contributions; with non-binding MOUs, contributions are voluntary.<sup>284</sup> While a binding agreement, thus, often leads to more stable funding to allow for long-term planning and implementation of an Agreement, it does not necessarily lead to greater conservation impact.<sup>285</sup> For example, the Saiga MOU has had robust implementation despite "marginal funding."<sup>286</sup> Since the signing of the MOU, the saiga's steep population decline has been arrested and populations across the species' range are increasing.<sup>287</sup>

But Agreements may be agreements only on paper due to a lack of financial resources and other reasons, even if they are binding. The Agreement on the Conservation of Gorillas and Their Habitats (Gorilla Agreement), a binding Article IV(3) agreement, includes seven of the ten Range States of lowland gorillas, and the parties have adopted various action plans for the species.<sup>288</sup> However,

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<sup>282</sup> See *id.* at 31.

<sup>283</sup> *Id.* at 36. Subsequently, the Range States took ownership of the MOU. See Report of the Third Meeting of Signatories to the Memorandum of Understanding Concerning Conservation and Restoration of the Bukhara Deer (*Cervus elaphus bactrianus*) (Bukhara Deer MOU), UNEP/CMS/BKD/MOS3/Meeting Rep. (2024) (showing significant governmental involvement).

<sup>284</sup> Lee et al., *supra* note 266, ¶¶ 45–58.

<sup>285</sup> In at least one case, Germany, the legally binding nature of an Agreement makes provision of its financial contribution easier. See Melanie Virtue, **Head of CMS Aquatic Species Team**, CMS Secretariat (Dec. 13, 2024).

<sup>286</sup> *An Assessment of MOUs*, *supra* note 262, at 35.

<sup>287</sup> See CMS, *Overview Rep. on Conservation Status and MOU Implementation, Restoration and Sustainable Use of the Saiga Antelope*, U.N. Doc. UNEP/CMS/Saiga/MOS4/Doc.5/Rev.2, ¶¶ 16, 82 (Sep. 2021).

<sup>288</sup> See Interim Secretariat of the Gorilla Agreement, *Progress Report on the Implementation of the CMS Gorilla Agreement*, UNEP/CMS/COP13/Inf.4.6 (2020). The Gorilla Agreement, as it is called, covers all four gorilla sub-species of the two gorilla species included in CMS Appendix I: Mountain Gorillas (*Gorilla beringei beringei*); Western Lowland Gorillas (*Gorilla gorilla gorilla*); Eastern

because the parties typically do not pay their annual contributions, the activities of the parties are limited.<sup>289</sup> Moreover, prior to the negotiation of the Gorilla Agreement, the United Nations Environment Programme (UNEP) had already launched the Great Apes Survival Partnership (GRASP) “to help ensure the long-term survival of gorillas, chimpanzees, bonobos and orangutans and their habitat in Africa and Asia.”<sup>290</sup> GRASP has its own institutional structure, which includes Range States and non-governmental organizations, with UNEP and United Nations Educational, Scientific and Cultural Organization (UNESCO) serving as the Secretariat,<sup>291</sup> but it does not have any legal status within UNEP, making it vulnerable to the whims of UNEP.<sup>292</sup> As such, UNEP, CMS, and Range States must find ways to make GRASP and the Gorilla Agreement mutually reinforcing, such as by making GRASP the secretariat for the Gorilla Agreement.<sup>293</sup>

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Lowland Gorillas (*Gorilla beringei graueri*); and Cross River Gorillas (*Gorilla gorilla diehli*). *Id.* at ¶ 1.

<sup>289</sup> See *id.* at ¶¶ 5, 20 (noting that no party had paid its contributions between 2013 and 2020).

<sup>290</sup> About GRASP, GREAT APES SURVIVAL P'SHIP, <https://www.un-grasp.org/about-grasp/> [<https://perma.cc/X8VD-5QFV>] (last visited Nov. 12, 2025).

<sup>291</sup> See Governance, GREAT APES SURVIVAL P'SHIP, <https://www.un-grasp.org/about-grasp/governance/> [<https://perma.cc/P9PE-49DV>] (last visited Nov. 12, 2025).

<sup>292</sup> GRASP is a collaborations between governments and nongovernmental organizations that have formed a voluntary agreement to take action that benefits great apes. United Nations, Great Apes Survival Partnership, UNEP/UNESCO/GRASP/ COUNCIL.2/ 2 (Oct. 4, 2012). UNEP funds the post of GRASP Coordinator from its core funds and has done so since 2002. No other partners contribute to providing funds for the Secretariat. UNEP could withdraw that funding, and so effectively eliminate the GRASP Secretariat at any time. Personal Communication with Melanie Virtue, **Head** of CMS Aquatic Species Team, CMS Secretariat (Dec. 13, 2024) (Ms. Virtue previously worked for GRASP as a Team Leader).

<sup>293</sup> See Agreement on the Conservation of Gorillas and Their Habitats, *Report of the Fourth Meeting of the Parties*, UNEP/GA/MOP4/Report, ¶ 36 (2023) (Noting that the GRASP Council had accepted the recommendation to host the Gorilla Agreement Secretariat, but only after other actions had been successfully implemented and on completion of “an independent study on the implications of adding the Gorilla Agreement to the responsibilities of the GRASP Secretariat.”).

Other Agreements have also floundered due to a lack of financial resources. These include, for example, the MOU concerning the Conservation Measures for Marine Turtles of the Atlantic Coast of Africa (Atlantic Turtles MOU).<sup>294</sup> However, even in these cases, positive conservation outcomes sometimes occur. For example, although fifteen years separated meetings of the signatories to the Atlantic Turtles MOU, a review of the national reports from ten of the twenty-five signatories revealed “[e]xtensive progress.”<sup>295</sup> The analysis concluded that:

Almost all the countries in the region have well-established sea turtle programs and the few that don’t have small groups implementing some activities. Nesting beach monitoring programs are widespread; while four countries report 100% monitoring of their nesting beaches, on average 33% of the nesting beaches are currently being monitored in the countries. In-water population and habitat monitoring projects are fewer. The majority of countries have bycatch monitoring projects in artisanal and/or industrial fisheries, but bycatch reduction projects are fewer.<sup>296</sup>

Another conservation success is the MOU for Bukhara Deer (*Cervus elaphus yarkandensis*). When the MOU was signed, populations were in “severe decline” but soon stabilized, and since 2011 they have been increasing.<sup>297</sup> In the Ili River Valley in Kazakhstan, for example, the population of Bukhara deer had vanished. After reintroduction, the population now exceeds 700 animals.<sup>298</sup> The five Range States and signatories (Afghanistan, Kazakhstan, Tajikistan, Turkmenistan, and Uzbekistan) have each established new protected areas for the Bukhara deer<sup>299</sup> and habitat has been restored.<sup>300</sup>

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<sup>294</sup> See *An Assessment of MOUs*, *supra* note 262, at 23, n.8 (“[B]oth Atlantic Turtles and West African Elephant MOUs have had implementation arrangements, which terminated, owing to an end to the funding or reduction of capacity within the partner organization.”).

<sup>295</sup> CMS, *Analysis of National Reports*, CMS/Atlantic-Turtle-MOU/MOS3/Doc.4, 2 (2023).

<sup>296</sup> *Id.*

<sup>297</sup> See CMS, *Outcomes of the Meeting Annex 1: Bukhara Deer Overview Rep.*, UNEP/CMS/BKD/TW1/Outcomes/Annex 1, ¶ 4 (Oct. 2020).

<sup>298</sup> See *id.* ¶ 17.

<sup>299</sup> *Id.* ¶¶ 26–31.

<sup>300</sup> *Id.* ¶¶ 62–63, 65. Nonetheless, a number of threats remain relevant and more habitat must be restored to connect habitats and populations. *Id.* ¶¶ 64, 66.

Similarly, a 2013 study found that for sixteen bat species across nine States, populations increased overall by 43% between 1993 and 2011, with nine species showing increases and just one showing a significant decline.<sup>301</sup> These population increases correlate with the adoption of the CMS-negotiated Agreement on the Conservation of Populations of European Bats (EUROBATS) in 1991,<sup>302</sup> and the report attributes the population increase to EUROBATS, in addition to the EU's Habitat's Directive.<sup>303</sup> A separate study concluded that EUROBATS has had "a dramatic positive effect on the status of bat populations" and achieved "considerable success in reversing the dwindling status of bat populations."<sup>304</sup>

Yet other Agreements show a lack of success or mixed success. For example, the conservation status of the thirty-one species of albatrosses, petrels, and shearwaters covered by the Agreement for the Conservation of Albatrosses and Petrels (ACAP) has continued to decline since ACAP's adoption due to bycatch in fisheries, climate change, and invasive species.<sup>305</sup> At the same time, the number of breeding sites with introduced vertebrates—which predate these ground-nesting birds—has declined, as have sites with other threats.<sup>306</sup>

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<sup>301</sup> EUROPEAN ENVIRONMENT AGENCY, EUROPEAN BAT POPULATION TRENDS: A PROTOTYPE BIODIVERSITY INDICATOR 6–7 (Nov. 19, 2013).

<sup>302</sup> EUROBATS was adopted on December 4, 1991, but did not enter into force until January 16, 1994. See United Kingdom, Joint Nature Conservation Committee, EUROBATS, at <https://jncc.gov.uk/our-work/agreement-on-the-conservation-of-populations-of-european-bats-eurobats/> [<https://perma.cc/HYC7-4FAY>] (last visited Nov. 12, 2025).

<sup>303</sup> See EUROPEAN ENVIRONMENT AGENCY, *supra* note 301, at 7.

<sup>304</sup> Balraj Sidhu, *The Protection of Migratory Species of Bats—A Review*, 41 ENV'T. POL'Y & L. 222, 224 (2011).

<sup>305</sup> ACAP Secretariat and BirdLife International, *Indicators to Measure the Success of the Agreement*, MoP7 Doc 16 Rev 2, 2–4 (2022). For more on threats to albatrosses and petrels, see Deborah Pardo et al., *Additive Effects of Climate and Fisheries Drive Ongoing Declines in Multiple Albatross Species*, 114 PROC. NAT'L ACAD. SCI. 1 (2017); Steffen Oppel, et al., *Cryptic Population Decrease Due to Invasive Species Predation in a Long-lived Seabird Supports Need for Eradication*, 59 J. APPLIED ECOL. 2059 (2022).

<sup>306</sup> See *Indicators to Measure the Success of the Agreement*, *supra* note 305, at 4–5.

Regardless of the relative conservation successes of the various CMS Agreements, almost all are achieving some on-the-ground conservation through their action plans,<sup>307</sup> the primary tool used to achieve their goal “to restore the migratory species concerned to a favourable conservation status or to maintain it in such a status.”<sup>308</sup> Each action plan includes a range of activities relevant to that species or group of species. The ACAP Action Plan, for example, includes provisions to protect and restore habitat, eliminate non-native species, reduce mortality in fisheries, and undertake research and monitoring, among other things.<sup>309</sup> The IOSEA Marine Turtles MOU includes provisions to reduce direct and indirect causes of sea turtle mortality (such as use of gear and devices to avoid incidental capture in fisheries), protect habitat (such as nesting beaches), and conduct research (such as developing an agreed set of protocols for monitoring nesting beaches and feeding grounds).<sup>310</sup>

#### 5. Beyond Agreements: Action Plans and Concerted Actions

In the absence of new Agreements, the CMS parties are turning to species action plans and concerted actions as a means to achieve species-specific conservation gains. Concerted actions are “priority conservation measures, projects or institutional arrangements” to improve the conservation status of specified Appendix I and Appendix II species.<sup>311</sup> They are “the collective responsibility of Parties acting in concert,” presumably in contrast to actions identified in an action plan that a party should implement domestically.<sup>312</sup> Lastly,

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<sup>307</sup> See, e.g., ACAP, *supra* note 260, at Annex 2(2) (establishing provisions for habitat conservation and restoration); Memorandum of Understanding on the Conservation and Management of Marine Turtles and their Habitats of the Indian Ocean and South-East Asia, (opened for signature June 23, 2001) (entered into force Sept. 1, 2001) [hereinafter IOSEA Marine Turtles MOU].

<sup>308</sup> CMS, *supra* note 7, art. V, ¶ 1 (for AGREEMENTS); *Implementation of Articles IV and V of the Convention*, *supra* note 81, ¶ 3 (for agreements).

<sup>309</sup> ACAP, *supra* note 260, at Annex 2.

<sup>310</sup> IOSEA Marine Turtles MOU, Conservation and Management Plan, <https://www.cms.int/iosea-turtles/en/page/mou-text-cmp> [<https://perma.cc/BK9H-NYRA>] (last visited Nov. 17, 2025).

<sup>311</sup> *Concerted Actions*, *supra*, note 27, ¶ 1.

<sup>312</sup> *Id.* Prior to COP10, the parties adopted concerted actions for Appendix I species and cooperative actions for Appendix II species. The two processes evolved slightly differently. One difference was that concerted actions entailed

although they are designed to lead to the conclusion of an Agreement,<sup>313</sup> no concerted action has yet done so.<sup>314</sup>

Nonetheless, concerted actions are leading to enhanced scientific understanding of species subject to them and to the development of action plans. For example, the parties adopted a concerted action for the critically endangered angelshark (*Squatina squatina*) in 2017.<sup>315</sup> Because the threats posed to the angelshark differ by geographical area, the concerted action proposed to develop regional action plans for the species.<sup>316</sup> After concluding that national legislation made development of an action plan for the northeast Atlantic population a low priority, the parties developed and adopted an Action Plan for the Angelshark in the Mediterranean Sea in 2024.<sup>317</sup> This Action Plan calls for identifying critical angelshark areas; improving collection of scientific information; strengthening national legislation, particularly with regard to prohibiting the catch, transshipment, and landing of angelsharks; and initiating or expanding on-board observer programs to monitor interactions of fishing vessels with angelsharks; among other things.<sup>318</sup>

In another example, the parties adopted a concerted action for the critically endangered Atlantic humpback dolphin (*Sousa teuszii*) in 2017 to hold a meeting of Range States and key stakeholders to develop an action plan for the species, which is threatened by

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“the responsibility of the Convention as a whole” whereas cooperative actions did not, at least in theory. CMS, *Concerted and Cooperative Actions*, UNEP/CMS/COP11/Doc. 22.4, Annex 1, 8 (2014). The two processes were unified at COP12 in 2017. *Implementation of Articles IV and V of the Convention*, *supra* note 27, at pmb1. para. 4.

<sup>313</sup> *Concerted Actions*, *supra* note 27, ¶ 1(b).

<sup>314</sup> Personal Communication with Melanie Virtue, Head, Aquatic Species Team, CMS Secretariat (Nov. 18, 2025).

<sup>315</sup> CMS, Concerted Action for the Angelshark, UNEP/CMS/COP12/Concerted Action 12.5 (2017).

<sup>316</sup> CMS, Concerted Action for the Angelshark (*Squatina squatina*), UNEP/CMS/Concerted Action 12.5 (Rev. COP13) (2020).

<sup>317</sup> CMS, Single Species Action Plan for the Angelshark in the Mediterranean Sea, UNEP/CMS/COP14/Doc.27.7.1, Annex 2 (2023) (containing the Action Plan); *see also* CMS, *Report of the 14th Meeting*, *supra* note 95, ¶ 347 (adopting the Action Plan).

<sup>318</sup> Single Species Action Plan for the Angelshark in the Mediterranean Sea, *supra* note 317, at Annex 2, 25–31.

bycatch in fisheries, targeted killing for food, trade, and bait, and coastal development.<sup>319</sup> The resulting action plan consolidates scientific information about the species and details areas where insufficient information exists.<sup>320</sup> It further contains a long list of specific activities for improving the conservation status of the species by gathering more and better scientific information, implementing bycatch reductions policies, reducing targeted killing of the species, minimizing habitat loss and degradation, and strengthening capacity.<sup>321</sup>

The parties have also developed and approved actions plans by other means. In 2017, the parties, based on a proposal of the Aquatic Species Working Group, requested the Scientific Council to prepare an action plan for the hawksbill turtle.<sup>322</sup> Similarly, the parties requested a Working Group on African-Eurasian Landbirds and the Scientific Council to prepare action plans for the turtle dove (*Streptopelia turtur*), yellow-breasted bunting (*Emberiza aureola*), and European roller (*Coracias garrulus*).<sup>323</sup>

From a conservation perspective, the use of action plans in lieu of Agreements does not appear to have significant disadvantages. The cornerstone of most MOUs has always been the development of an action plan. As regular and frequent meetings of the

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<sup>319</sup> CMS, *Concerted Action for the Atlantic Humpback Dolphin (Sousa teuszii)*, UNEP/CMS/Concerted Action 12.3, at 1, 3 (2017). The concerted action was renewed in 2020. CMS, *Concerted Action for the Atlantic Humpback Dolphin (Sousa teuszii)*, UNEP/CMS/Concerted Action 12.3 (Rev.COP13) (2020).

<sup>320</sup> See CMS, *Single Species Action Plan for the Atlantic Humpback Dolphin (Sousa teuszii)*, 5–15, UNEP/CMS/COP14/Doc.27.5.2/Rev/Annex 2, 5, 15 (2023).

<sup>321</sup> *Id.* at 25–35.

<sup>322</sup> See CMS, *Consolidation of Resolutions: Marine Turtles*, UNEP/CMS/COP12/CRP108 (2017) (containing the decision); CMS, Report of the 12th Meeting of the Conference of the Parties to the Convention on the Conservation of Migratory Species of Wild Animals, UNEP/CMS/COP12/Report, ¶ 670 (2017).

<sup>323</sup> See CMS, *Action Plan for Migratory Landbirds in the African-Eurasian Region*, UNEP/CMS/Res. 11.17, ¶ 11 (2014). The resolution has been subsequently amended and now calls for the implementation of those actions plans. CMS, *Action Plan for Migratory Landbirds in the African-Eurasian Region*, UNEP/CMS/Res. 11.17 (Rev. COP12), ¶ 16 (2024). The parties adopted those action plans at their 12th meeting in 2017. CMS, *Action Plan for the European Roller*, UNEP/CMS/Action Plan 12.4 (2017); CMS, *Report of the 48th Meeting of the CMS Standing Committee*, UNEP/CMS/StC48/Report 28 (2018).

signatories are rare for most MOUs, the lack of a dedicated meeting of experts in relation to a specific species is not truly missed.<sup>324</sup> Yet, this approach still places significant burdens on the Secretariat to bring the relevant Range States together to develop an action plan, as well as to facilitate and monitor its implementation. Even if the Range States do not have expectations for meetings under action plans, they still must coordinate their activities in some way to ensure that their on-the-ground actions are providing conservation benefits to the species.

Perhaps most importantly, the Secretariat still needs financial resources to assist Range States to implement the action plan, even if fewer resources are needed to administer an action plan since it does not require additional institutional machinery. Without such finance, the parties may perceive a proliferation of action plans in the same way they did with MOUs. For CMS to achieve its goal to restore and maintain a favourable conservation status of listed species, the parties must provide the appropriate resources regardless of whether the primary tool is an AGREEMENT, an agreement, or an action plan.

#### *D. The Establishment of a Review Mechanism and a National Legislation Programme*

In the months before COP11 in 2014, the CMS Executive Secretary, Bradnee Chambers, sought to strengthen CMS's institutions and implementation, particularly through the development of a compliance mechanism. And with good reason. More than a decade earlier, the United Nations Environment Programme had identified "[s]trengthening of compliance with multilateral environmental agreements . . . as a key issue."<sup>325</sup> While most major multilateral environmental agreements (MEAs) had a process to review

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<sup>324</sup> The exception to this rule appears to be the Sharks MOU, which has met four times in fourteen years. Given its global scope covering 37 species and large membership—49 signatories, the EU and 15 Cooperating Partners—this is one Agreement that surely benefits from face-to-face meetings to progress conservation efforts for these species. *See* Meetings, SHARKS - MEMORANDUM OF UNDERSTANDING ON THE CONSERVATION OF MIGRATORY SHARKS, <https://www.cms.int/sharks/en/meetings/meetings-of-signatories> [<https://perma.cc/4YSD-976G>] (last visited Nov. 17, 2025).

<sup>325</sup> UNEP Guidelines on Compliance with and Enforcement of Multilateral Environmental Agreements, ¶ 5 (2002).

compliance and implementation at this time, including the CMS-negotiated AEWA, CMS did not.<sup>326</sup> A compliance mechanism could help facilitate the cooperation and action needed by all Range States for the conservation and effective management of migratory species. To initiate a discussion concerning the development of such a process within the Convention, the Secretariat prepared a paper summarizing the processes used by MEAs and other relevant agreements to “enhance implementation and compliance” and proposed a process for developing a CMS compliance mechanism.<sup>327</sup>

The Secretariat’s proposal proved controversial, and a “lively” debate ensued on the floor of the meeting and in the working group established to consider a way forward.<sup>328</sup> The resulting resolution of the parties instructed a working group to consider options for a “review process” for consideration of the Standing Committee.<sup>329</sup>

That working group met during the intersessional period and proposed to COP12 a process to review all mandatory obligations, including the take prohibition of Article III and reporting obligations of Articles III and VI.<sup>330</sup> The proposal left many questions unanswered, however, as indicated by the many square brackets

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<sup>326</sup> See AEWA, *Establishment of an Implementation Review Process*, Res. 4.6 (2008); Montreal Protocol on Substances that Deplete the Ozone Layer, *Non-compliance Procedure*, in HANDBOOK FOR THE MONTREAL PROTOCOL ON SUBSTANCES THAT DEplete THE OZONE LAYER 798 (14th ed. 2020); CITES, *CITES Compliance Procedures*, Res. Conf. 14.3 (Rev. CoP19) (2022); Secretariats of the Basel Convention & Rotterdam Convention, Procs. and Mechanisms on Implementation and Compliance with the Basel and Rotterdam Conventions, UNEP/BRS/SBC/SRC/2019/1, Annex 2 (Nov. 2019).

<sup>327</sup> CMS, *Enhancing the Effectiveness of the Convention through a Process to Review Implementation*, UNEP/CMS/COP11/Doc.18.3/Rev.1 (2014).

<sup>328</sup> CMS, *Proceedings of the 11th Meeting of the Conference of the Parties*, UNEP/CMS/COP11/Proceedings, ¶¶ 153–73 (2014). While not reflected in the *Proceedings* of the meeting, the author, as the legal advisor to the Secretariat, watched the chair of the Committee of the Whole, Øystein Størkersen, save this issue from German opposition by drafting and redrafting text until all opposition was eliminated.

<sup>329</sup> CMS, *Enhancing the Effectiveness of the Convention through a Process to Review Implementation*, UNEP/CMS/Res. 11.7, in *COP11 Proceedings*, *supra* note 297, at 225 (2014).

<sup>330</sup> CMS Secretariat, *Options of a Review Process for the Convention on Migratory Species*, UNEP/CMS/COP12/Doc.22/Rev.1, Annex 1 (Sept. 2017).

around text on which the working group could not agree.<sup>331</sup> During the meeting, the parties merged the review process with a separate issue concerning review of national legislation.<sup>332</sup>

The resulting review process adopts a “supportive, non-adversarial and facilitative approach” focused on long-term compliance with the habitat and other obligations of Article III(4), the take prohibition of Articles III(5) and III(7), and the obligation of Article VI(2) to identify as a Range State of listed species.<sup>333</sup> The process can be triggered based on information from the Secretariat, a party, the Standing Committee, and non-governmental organizations; a party may also self-report non-compliance.<sup>334</sup> The Secretariat is tasked with assessing the information submitted, determining whether to seek a response from the party concerned, and deciding whether the party has failed to address the matter within a reasonable time.<sup>335</sup> If the party concerned has failed to respond within a reasonable time, the Secretariat submits the matter to the Standing Committee.<sup>336</sup> If the Standing Committee determines that the party concerned, after a reasonable opportunity to resolve the matter, has not done so, it may provide further advice, information, or assistance to the party, request special reporting from the party, or issue a warning to the party.<sup>337</sup>

To date, the Secretariat has referred just one matter to the Standing Committee for consideration.<sup>338</sup> The matter concerns Albania’s “plans to construct a new airport along with a new port and tourism facilities, including hotels and resorts, vineyards, and residential and sports areas, in the Vjosa-Narta Protected Landscape in Albania,” a project that may adversely affect several Appendix I

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<sup>331</sup> See *id.* annex 1.

<sup>332</sup> See *Establishment of a Review Mechanism and a National Legislation Programme*, *supra* note 209.

<sup>333</sup> *Id.* ¶ I(A)(1).

<sup>334</sup> *Id.* ¶ I(B)(2).

<sup>335</sup> *Id.* ¶ I(C)(4)–(5).

<sup>336</sup> *Id.* ¶ I(C)(5).

<sup>337</sup> *Id.* ¶ I(F)(6).

<sup>338</sup> See *CMS Review Mechanism*, UNEP/CMS/StC53/Doc.16, ¶ 5 (2022).

bird species.<sup>339</sup> The matter remains under review, consistent with the procedure of Resolution 12.9 and, as such, is not yet resolved. Nevertheless, even with just one implementation matter reported, discussion at COP14 in 2024 indicates that the Review Mechanism may be having a positive effect on parties. During that meeting, India objected to the process as a whole, but many other parties rallied to ensure that no changes were made to the Review Mechanism, arguing that it was needed to ensure the integrity of the Convention.<sup>340</sup> Moreover, the parties agreed on operational guidelines to clarify the process and further its transparency through the establishment of an online registry for ongoing reviews.<sup>341</sup>

Separately, the National Legislation Programme is improving implementation of the Convention. The Secretariat initially reviewed the legislation of all parties and concluded, among other things, that many parties do not prohibit “harassment” as an element of “take” and do not prohibit “attempts” to “take” Appendix I animals.<sup>342</sup> One particular problem is that some parties do not implement CMS through a single law and, as a result, more than one law may need to be amended to protect one species that may, for example, inhabit both terrestrial and marine environments.<sup>343</sup>

By COP14, a new analysis concluded that parties “have made progress in strengthening governance arrangements” and that parties “reported recent successes in their efforts to enact and update legislation, combat specific threats and safeguard important sites for migratory species.”<sup>344</sup> In fact, sixteen of the fifty-five parties submitting their national reports reported that they adopted new or

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<sup>339</sup> *Id.* annex. The Scientific Council reviewed information relating to the project and concluded that “the project might negatively affect several Appendix I species,” including the Dalmatian pelican (*Pelecanus crispus*), white-headed duck (*Oxyura leucocephala*), ferruginous duck (*Aythya nyroca*), lesser kestrel (*Falco naumanni*), and greater spotted eagle (*Aquila clanga*). *Id.* at 5.

<sup>340</sup> These discussions took place in a working group meeting that the author attended. No records report on these discussions.

<sup>341</sup> *Report of the Meeting*, *supra* note 95, ¶ 209; *see also* CMS, *Review Mechanism and National Legislation Programme*, UNEP/CMS/COP14/Doc.24 (2024).

<sup>342</sup> CMS, *Review Mechanism and National Legislation Programme*, annex 2, ¶¶ 45–49, UNEP/CMS/COP13/Doc.22 (2020).

<sup>343</sup> *See id.* ¶¶ 18–19.

<sup>344</sup> UNEP-WCMC, *supra* note 105, at 39.

updated domestic legislation designed to improve protection for migratory species.<sup>345</sup> In addition, nine parties reported adopting specific measures to prevent illegal killing and poisoning, five took measures to reduce the impacts of energy infrastructure, and four enacted measures to combat various forms of pollution.<sup>346</sup> Thirty-eight parties indicated that they adopted new measures to implement Article III(4)(b) to remove obstacles to migration.<sup>347</sup> While the level of reporting is disappointingly low, the improvements in legislation are significant because they relate directly to various CMS initiatives to implement Article III(4).<sup>348</sup>

Still, more needs to be done. For example, some parties do not prohibit the take of all Appendix I species.<sup>349</sup> Nevertheless, the National Legislation Programme and the Review Mechanism are important processes that are guiding parties towards improved implementation of CMS. Their development and use show that CMS is now taking an active approach to ensuring compliance with the Convention's obligations for Appendix I species.

### III. CHALLENGES AND OBSTACLES TO FURTHER SUCCESS

Despite the considerable progress made within CMS to improve its institutional structures and enhance compliance, as well as on-the-ground conservation activities taken by the parties to fulfill their obligations, CMS still faces several challenges. These include the Convention's large geographic gap in coverage, climate change, and a serious lack of funding.

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<sup>345</sup> *Id.* at 4.

<sup>346</sup> *Id.*

<sup>347</sup> *Id.* at 22.

<sup>348</sup> See, e.g., CMS, *Preventing Poisoning of Migratory Birds*, UNEP/CMS/Res. 11.15 (Rev.COP14) (2024); *The Prevention of Illegal Killing, Taking and Trade of Migratory Birds*, *supra* note 20; CMS, *Renewable Energy and Migratory Birds*, UNEP/CMS/Res. 11.27 (Rev.COP13) (2020). Failure to report or to report on time is an unfortunate but common feature of multilateral environmental agreements. At the most recent CITES COP in 2022, for example, the CITES Secretariat received Annual Illegal Trade Reports from roughly 45% of parties in both 2020 and 2021. CITES, *Annual Illegal Trade Reports*, COP19 Doc. 34, ¶ 12 (2022).

<sup>349</sup> See UNEP-WCMC, *supra* note 105, at 8.

### A. Geographical Gaps

Although roughly two-thirds of all States (133 parties, including the European Union) participate in CMS, States representing roughly two-thirds of terrestrial Earth do not.<sup>350</sup> China, Canada, Mexico, Russia, and the United States, as well as Japan and South Korea are all non-parties.<sup>351</sup> Because a fundamental premise of migratory species conservation is that the entire range of the species should be subject to conservation and management measures, this geographic gap represents a significant obstacle to achieving the Convention's goal to restore and maintain a favourable conservation status for listed migratory species.<sup>352</sup>

The United States, like Japan and Russia (then the Soviet Union), was a key CMS negotiator, successfully proposing major changes to the Convention during the final negotiations.<sup>353</sup> Nevertheless, the United States has never become a CMS party.<sup>354</sup> The

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<sup>350</sup> CMS, *Parties and Range States*, <https://www.cms.int/parties> [<https://perma.cc/V6WG-WS2P>].

<sup>351</sup> Most of the States of South East Asia have failed to ratify CMS, as well. *Id.*

<sup>352</sup> For more on the impacts of this geographic gap in CMS membership, albeit writing in 2005, see Caddell, *supra* note 15, at 152–55.

<sup>353</sup> For example, the United States proposed the inclusion of the word “cyclically” to further define “migratory species.” United States, Proposed Amendment of Article I, PL 9 (June 13, 1979). It also proposed limiting Appendix I to “endangered species” rather than those with an “unfavourable conservation status” and then shifted the focus of Appendix II to those species with an “unfavourable conservation status or have a conservation status or have a conservation status which would significantly benefit from the international co-operation which could be achieved by an international agreement” rather than any migratory species. United States, PL 10, *supra* note 181 (redefining the scope of Appendix I); United States, PL 11, *supra* note 236 (redefining the scope of Appendix II). The United States is also responsible for the CMS provision that allows for the development of agreements for species not included in Appendix II and which periodically but not cyclically cross one or more borders. *Id.*

<sup>354</sup> A Draft Environmental Impact Statement states that a convention such as the one that the Federal Republic of Germany proposed in 1979 “could significantly advance U.S. goals in international wildlife conservation.” Draft CMS Environmental Impact Statement, *supra* note 130, at 61. The United States has suggested a number of reasons why it has not become a party, although analyses have shown that any concerns are minimal or can be overcome. Kristina Alexander, Legal Issues Related to U.S. Accession to the Convention on Migratory Species (Cong. Res. Serv. Feb. 18, 2009) (on file with author); Chris Wold, Legal Opinion concerning the Accession by the United States of the Convention on the

United States does participate as a signatory to the Sharks, Pacific Islands Cetaceans, and IOSEA MOUs, and Russia participates in the Saiga and Siberian Crane MOUs.<sup>355</sup> Yet, these non-parties are Range States for many other species and, as such, their participation in CMS would help facilitate more effective conservation and management of migratory species.<sup>356</sup>

The CMS strategic plan for 2024–2032 sets a target of increasing the number of parties from 133 to 160 by 2032.<sup>357</sup> If the parties achieve that goal and some of the new parties are among the four States with the largest territories (Canada, China, Russia, and the United States), then the Convention will be better placed to achieve its conservation goals.

### B. *Climate Change and Catastrophic Impacts to Migratory Species*

Human-induced climate change, the planet's greatest environmental threat, poses implementation challenges for many, if not most, international agreements.<sup>358</sup> CMS is no different. The parties

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Conservation of Migratory Species of Wild Animals (2008) (on file with author). For a list of delegates attending the negotiations, including those from Japan, the United States, and the Soviet Union, see Conference to Conclude a Convention on the Conservation of Migratory Species of Wild Animals, Inf. 15 (June 18, 1979). See Conference to Conclude a Convention on the Conservation of Migratory Species of Wild Animals, Inf. 15 (June 18, 1979) For a list of delegates attending the negotiations, including those from Japan, the United States, and the Soviet Union,<sup>355</sup> See CMS, Parties and Range States, at <https://www.cms.int/parties> [<https://perma.cc/V6WG-WS2P>].

<sup>356</sup> See *id.* (showing for each State some of the CITES-listed species for which they are Range States).

<sup>357</sup> *Samarkand Strategic Plan for Migratory Species 2024–2032*, *supra* note 34, at 8.

<sup>358</sup> See Press Release, United Nations, Office of the High Commissioner on Human Rights, Climate Change the Greatest Threat the World Has Ever Faced, (Oct. 21, 2022) (quoting Ian Fry, UN Special Rapporteur on the promotion and protection of human rights in the context of climate change, who stated that “[h]uman-induced climate change is the largest, most pervasive threat to the natural environment and societies the world has ever experienced . . .”); see also, Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, Summary for Policymakers of the IPBES Global Assessment on Biodiversity and Ecosystem Services, 28 (2019) (explaining how pollution and biodiversity loss caused primarily by habitat destruction and deterioration due to

have recognized “with extreme concern” that climate change impacts on some migratory species “are catastrophic at both the individual species and ecosystem levels.”<sup>359</sup> Climate change will, thus, pose obstacles towards achieving the CMS goal to ensure the favourable conservation status of migratory species.<sup>360</sup> Continued exploration for fossil fuels, which will only exacerbate climate change, has devastating impacts on species, such as birds.<sup>361</sup> Nesting beaches for sea turtles may disappear due to rising sea levels;<sup>362</sup> gorillas, chimpanzees and other terrestrial mammals may lose important habitat, including water sources,<sup>363</sup> and migrating bats and birds may be killed by the increasing deployment of renewable energy.<sup>364</sup> Many other catastrophic impacts, including modifications to migration itself, may adversely affect migratory species.<sup>365</sup> Each of these climate-related impacts pose unique challenges to parties as they attempt to maintain or restore a species’ favourable conservation status.

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intensive agriculture, also pose grave threats to species, and the issues of climate change, pollution, and habitat loss are often entwined).

<sup>359</sup> CMS, *Climate Change and Migratory Species*, UNEP/CMS/Res. 12.21 (Rev. COP14), pmb. para. 2 (2024).

<sup>360</sup> CMS, *supra* note 7, art. II, ¶ 1.

<sup>361</sup> See, e.g., Erik Katovich, *Quantifying the Effects of Energy Infrastructure on Bird Populations and Biodiversity*, 58 ENV’T. SCI. & TECH. 323, 330 (2023) (finding “no measurable effect of wind energy installations on bird population counts or species diversity at the circle-level,” but finding that “onset of shale oil and gas production exerts significant negative effects on bird population counts, as well as significant negative effects on counts of bird species diversity when wells are drilled inside important bird habitats.”).

<sup>362</sup> See Natalie E. Wildermann et al., *An Emerging Hazard to Nesting Sea Turtles in the Face of Sea-Level Rise*, 56 GLOBAL ECOLOGY & CONSERVATION 1, 1–2 (2024). See Jakob C. Christiaan et al., *Distribution of Global Sea Turtle Nesting Explained from Regional-scale Coastal Characteristics*, 14 SCI. REPORTS 13 (2024).

<sup>363</sup> See, e.g., Razak Kiribou et al., *Exposure of African Ape Sites to Climate Change Impacts*, PLOS CLIMATE, Feb. 2024, at 3.

<sup>364</sup> John D. Lloyd et al., *Seasonal Patterns of Bird and Bat Collision Fatalities at Wind Turbines*, PLOS ONE, May 2023, at 14.

<sup>365</sup> Manon Clairbaux et al., *Climate Change Could Overturn Bird Migration: Transarctic Flights and High-Latitude Residency in a Sea Ice Free Arctic*, 9 SCI. REPORTS 2 (2019).

In addition, many species are increasingly dispersing to find habitat that is suitable for them.<sup>366</sup> As a consequence, CMS-listed species may wander across borders to habitats in States to which they have not previously inhabited.<sup>367</sup> At what point must a party declare itself a Range State and apply the requirements of Article III to Appendix I species? While it may be relatively simple to prohibit the take of such species, it is quite another to remove obstacles to migration or enact other measures required by Article III(4) to address the impacts noted in the previous paragraph.

The definitions of CMS suggest that an individual incursion of a species into the territory of a State is not sufficient to trigger the obligations of Article III. Recall that the obligations of Article III apply to a Range State—any State “that exercises jurisdiction over any part of the range of that migratory species.”<sup>368</sup> CMS defines “range” to mean “all the areas of land or water that a migratory species inhabits, stays in temporarily, crosses or overflies at any time on its normal migration route.”<sup>369</sup> While words and phrases such as “temporarily” and “at any time” suggest a one-time visit is part of a migratory species’ range, the visit must be part of the species’ “normal” migration route. A one-off visit or even several visits dispersed over time would not suggest a “normal” migration pattern.<sup>370</sup>

The parties debated this issue in 2024 at COP14.<sup>371</sup> The meeting paper introducing the issue carefully avoided asking the parties

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<sup>366</sup> See, e.g., Robert A. Davis & David M. Watson, *Vagrants as Vanguard of Range Shifts in a Dynamic World*, 225 *BIOLOGICAL CONSERVATION* 238 (2018). See also Marion Renault, *These Birds Aren’t Lost. They’re Adapting.*, N.Y. TIMES (Apr. 7, 2022); Elizabeth Gamillo, *Bird Migration Patterns Are Changing—and Climate Change May Be to Blame*, SMITHSONIAN MAG., Nov. 21, 2021.

<sup>367</sup> CMS, *Implementation of Decision 13.140: Guidance on the Use of the Term “Vagrant,”* UNEP/CMS/COP14/Doc.26/Rev.1, ¶¶ 10–14 (Aug. 3, 2023).

<sup>368</sup> CMS, *supra*, note 7, art. I, ¶ 1(h).

<sup>369</sup> *Id.* art. I, ¶ 1(f).

<sup>370</sup> Moreover, CMS defines “migratory species” to require the species to “cyclically and predictably cross one or more national jurisdictional boundaries.” *Id.* art. I, ¶ 1(a). While this definition determines whether a species is, in fact, migratory and within the jurisdiction of the convention, it is not unreasonable to interpret “normal” in relation to “predictable” as a condition of a State being a “Range State.”

<sup>371</sup> See CMS, *Implementation of Decision 13.140: Guidance on the Use of Term “Vagrant,”* UNEP/CMS/COP14/Doc.26/Rev.1 (Aug. 3, 2023). The parties at

to adopt a definition of “vagrant” in a resolution, instead asking the parties to “take note” of the document, including its accompanying guidelines on the use of the term vagrant, and to consider any further work, if necessary.<sup>372</sup> The Guidelines highlighted that a numerical threshold to determine whether a State is a Range State of a vagrant “is not advisable due to the wide variety of circumstances surrounding movement patterns of different species.”<sup>373</sup> Moreover, a lack of data might hinder a full understanding of a species’ changes in migration: “detection of only a few individuals of a species may indicate vagrancy or could indicate either an unknown population of a species or a significant shift in the distribution of a species over time . . . .”<sup>374</sup>

As such, the Guidelines list a few factors that might help determine whether a species is merely a vagrant or whether a party should be treated as a Range State. These factors are whether:

- (a) observations are irregular or sporadic (i.e., without a pattern or predictability);
- (b) the number of observed individuals is not increasing over time;
- (c) observations are located outside the known current range, historic range or normal migration routes for the species/population;
- (d) the number of individuals observed is considered very small relative to the size of the population listed by CMS (which might be global or regional).<sup>375</sup>

Even with generally worded guidelines and a “soft ask” of the parties to “take note” of the Guidelines, the issue proved controversial. Some parties, such as the EU and its Member States, among others, advocated for “taking note” of the report and to discontinue work

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COP13 in 2020 directed the Scientific Council to develop practical guidance and interpretations of “Range State” and “vagrant.” CMS, *Definition of the Terms “Range State” and “Vagrant,”* UNEP/CMS/Decisions COP13/Decision 13.140, at 50 (2020). The Scientific Council then discussed these definitions and proposed guidance in 2021 before submitting its guidance to COP14. CMS Scientific Council, *Discussion Paper for the Scientific Council on Decision 13.140: Definition of the Terms “Range State and “Vagrant,”* UNEP/CMS/ScC-SC5/Doc.7 (2021).

<sup>372</sup> UNEP/CMS/ScC-SC5/Doc.7, *supra* note 371, at Annex and ¶ 20.

<sup>373</sup> *Id.* at Annex, ¶ 6.

<sup>374</sup> *Id.* at Annex, ¶ 7.

<sup>375</sup> *Id.* at Annex, ¶ 1.

on the subject.<sup>376</sup> With this approach, there would be no expectation that the parties would actually use the Guidelines. Other parties, including the United Kingdom and Australia, wanted to give the Guidelines more prominence by “adopting” them for the parties to use.<sup>377</sup> The issue was moved to a working group for further discussion, during which parties proposed a variety of verbs—for example, “take note,” “welcome,” and “adopt”—to describe the action that parties would take concerning the guidelines. Those verbs were immediately put in square brackets to indicate that one or more members objected to that verb. In the end and after much debate, “[t]he COP appreciated the work undertaken by the [Scientific Council] on implementation of Decision 13.140 and noted the report contained in document UNEP/CMS/COP14/Doc.26/Rev.1 *Implementation of Decision 13.140: Guidance on the Use of the Term “Vagrant.”*”<sup>378</sup>

Because the parties only “noted” the document, the document and its Guidelines are not part of CMS “law.” The Guidelines are simply “out there” for the parties to use if they so choose. Each party has discretion to determine whether it is a Range State for a species that may be dispersing to its territory in light of climate change or other factors, and the Guidelines cannot be used to determine whether a party has made its determination accurately. While this may be consistent with CMS—Article VI directs parties to inform the Secretariat of those species for which they “*consider themselves to be Range States*”<sup>379</sup>—the result leaves already endangered species vulnerable not only to climate change but to take if a party does not declare itself to be a Range State. Given the contested nature of the debate at COP14, this issue will not be reconsidered by the parties any time soon.

### C. Lack of Funding

Since its inception, CMS has been plagued by “chronic underfunding.”<sup>380</sup> Since COP2 in 1988, the Secretariat and some parties

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<sup>376</sup> *Report of the 14th Meeting, supra* note 95, ¶ 216.

<sup>377</sup> *Id.* at ¶¶ 218, 222.

<sup>378</sup> *Id.* at ¶ 226.

<sup>379</sup> CMS, *supra* note 7, art. VI, ¶ 2 (emphasis added).

<sup>380</sup> BOYLE & REDGWELL, *supra* note 16, at 652; Shine, *supra* note 267, at 198.

have complained of a lack of funds for implementing basic aspects of the Convention,<sup>381</sup> including convening a full meeting of the Standing Committee.<sup>382</sup> By COP4 in 1994—more than a decade into the life of the Convention—the budget had remained largely unchanged since 1985, and the Secretariat comprised just two professional staff and two administrative assistants, in addition to a part-time scientific adviser seconded from the German government.<sup>383</sup>

While the situation is not as dire today as it was previously, the CMS budget remains small relative to the number of CMS parties, the broad scope of the program of work, and the breadth of Agreements the Secretariat administers. For example, the CMS budget for the 2024–2026 triennium is €9,769,260 (about \$10,650,350)<sup>384</sup> whereas the CITES budget for the 2023–2025 triennium is nearly double at \$19,839,465.<sup>385</sup> Compared to CMS, CITES has more parties (184) and more species included in its appendices (more than 40,000),<sup>386</sup> but it has a smaller mandate—international trade in listed species.<sup>387</sup> As such, it is difficult to explain this disparity, although perhaps economic interests with respect to trade in endangered species and the possibility of trade sanctions for noncompliance offer two reasons.<sup>388</sup> While international trade poses a significant threat

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<sup>381</sup> CMS, *Proceedings of the Second Meeting of the Conference of the Parties*, *supra* note 246, ¶ 31 (“Due to a lack of funds, the Secretariat could rarely travel to meetings . . .”).

<sup>382</sup> *Id.* at ¶ 32.

<sup>383</sup> CMS, *Proceedings of the Fourth Meeting of the Conference of the Parties*, UNEP/CMS/Conf.4.16, ¶¶ 67, 149 (1994).

<sup>384</sup> *Financial and Administrative Matters*, *supra* note 279, annex 1.

<sup>385</sup> CITES, *Financing and the Costed Programme of Work for the Secretariat for the Triennium 2023–2025*, Res. Conf. 19.1, ¶ 13 (2022).

<sup>386</sup> *List of Parties to the Convention*, CITES, <https://cites.org/eng/disc/parties/index.php> [<https://perma.cc/A4TR-HLWL>] (last visited Oct. 17, 2025); CITES, *The CITES Species*, <https://cites.org/eng/disc/species.php> [<https://perma.cc/RX63-SA7V>].

<sup>387</sup> CITES, *supra* note 7, art. II, ¶ 4.

<sup>388</sup> Between 2016 and 2020, exports of CITES-listed species were estimated to exceed \$11 billion annually. CITES Secretariat, *World Wildlife Trade Report 2022* 34 (2022). *See also* CITES, *CITES Compliance Procedures*, Res. Conf. 14.3 (Rev. CoP19), ¶ 30 (allowing for trade suspensions for noncompliance).

to many species, “changes in land and sea use,” resulting in habitat loss and degradation, remain the biggest threats to most species.<sup>389</sup>

The CMS budget is also smaller than other biodiversity-related agreements. The 2023–2025 budget for the Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention), is 15,243,000 Swiss Francs (\$17,368,000).<sup>390</sup> Even the much smaller Western and Central Pacific Fisheries Commission (WCPFC) has an approved one-year 2024 budget of \$9,308,383 that approaches the CMS three-year budget.<sup>391</sup> The 2024 budget for the Convention on Biological Diversity is \$21,714,500.<sup>392</sup>

The failure of many parties to pay their mandatory contributions further erodes CMS’s small budget and the Secretariat’s ability to perform the tasks the parties have directed it to undertake.<sup>393</sup> As

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<sup>389</sup> Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, *Summary for Policymakers of the IPBES Global Assessment on Biodiversity and Ecosystem Services*, 11–12 (2019).

<sup>390</sup> Ramsar Convention, *Financial and Budgetary Matters*, Res. XIV.1 (2022). The Ramsar Convention does have 172 parties but otherwise shares some similarities with CMS. Ramsar Convention, Contracting Parties to the Ramsar Convention (Aug. 24, 2023). Meetings are conducted in three languages—English, French, and Spanish—and the Ramsar Convention focuses on habitat conservation through the lens of species conservation. Convention on Wetlands of International Importance Especially As Waterfowl Habitat, Feb. 2, 1971, 11 I.L.M. 969 (1972) (entered into force Dec. 21, 1975).

<sup>391</sup> See Western and Central Pacific Fisheries Commission, *Provisional Meeting Outcomes and Attachments (Rev01)*, WCPFC20-2023-OUTCOMES, 17 (2023) [hereinafter WCPFC]. The WCPFC, while managing a tuna fishery worth billions, is much smaller than CMS with just 26 members in addition to seven participating territories, and several cooperating non-members. See WCPFC, *About WCPFC* (updated Feb. 26, 2024), <https://www.wcpfc.int/about-wcpfc> [<https://perma.cc/ZD84-628Y>]. For more on the value of the fisheries managed by the WCPFC, see TIFFANY VIDAL, PETER WILLIAMS, & THOMAS RUAIA, WCPFC, OVERVIEW OF TUNA FISHERIES IN THE WESTERN AND CENTRAL PACIFIC OCEAN, INCLUDING ECONOMIC CONDITIONS – 2023 (2024).

<sup>392</sup> Convention on Biological Diversity, *Budget for the Integrated Programme of Work of the Secretariat*, Decision 15/34, in Rep. of the Conference of the Parties to the Convention on Biological Diversity on the Second Part of Its Fifteenth Meeting, CBD/COP/15/7, 248, ¶ 3 (Oct. 20, 2023).

<sup>393</sup> See Caddell, *supra* note 15, at 140–41 (noting that the small budget, coupled with significant arrears in contributions creates a “snowball effect” that diminishes

the Secretariat reported at COP14, 43 of the Convention's 133 parties during the period had paid their contributions for 2023, amounting to just 57.5% of assessed contributions for that year.<sup>394</sup> The total unpaid contributions were €1,359,325 for 2023, €434,151 for 2022, €226,287 for 2021 and €355,852 for years prior to 2021.<sup>395</sup> The total unpaid contributions of €2,375,615 was 86% of the 2021 budget of €2,748,047.<sup>396</sup> Parties in arrears of three years or more are denied the right to vote at CMS meetings and their representatives may not hold office in Convention bodies.<sup>397</sup> Developing countries in arrears are also denied, "as a general rule," travel funds to attend meetings.<sup>398</sup> These disincentives do not appear adequate to motivate parties to pay their mandatory contributions, yet CMS would not appear to have other tools to compel payment.

Despite the growing program of work, including administration of Agreements and action plans, the parties have not been willing to increase their contributions to fund the Secretariat adequately.<sup>399</sup> At

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staffing levels and the ability of the Secretariat and the Convention itself to perform vital tasks).

<sup>394</sup> CMS, *Execution of the CMS Budget 2021–2023*, UNEP/CMS/COP14/Doc.13.1, ¶ 4 (2023)

<sup>395</sup> *Id.*

<sup>396</sup> *Id.* ¶¶ 4, 13.

<sup>397</sup> *See id.* ¶ 7 (recalling the rules set out in Resolution 13.2); *Financial and Administrative Matters*, *supra* note 279, ¶ 11.

<sup>398</sup> *See Financial and Administrative Matters*, *supra* note 279, ¶ 10.

<sup>399</sup> The Secretariat provided some additional context on the need for a budget increase:

It is anticipated that CMS COP14 will adopt a significant set of resolutions and decisions that directly contribute to the achievement of the Kunming-Montreal Global Biodiversity Framework (GBF) as well as other global priorities. COP14 will also adopt a new Strategic Plan for Migratory Species for 2024–2032 that will guide Parties and stakeholders in prioritizing actions, and which will help deliver on the GBF, the 2030 Agenda for Sustainable Development and other global commitments. COP14 will consider new programmes of work and actions for flyways, cetaceans and climate change. It will assess new global guidelines and best practices on such key issues as infrastructure, renewable energy and light pollution. It will also consider the addition of 14 more species to its Appendices. It will advance the many areas of work on avian, terrestrial and aquatic species, as well as key cross-cutting work including on national legislation. The budget for 2024–2026 needs to

COP14, for example, the Secretariat asked for an additional staff person for the Aquatic Species Team.<sup>400</sup> Currently, four separate individuals combine for just 1.3 full time equivalent (FTE) because they also have responsibilities to ASCOBANS, the IOSEA Marine Turtle MOU, and the Sharks MOU from which their salaries are partially or fully paid.<sup>401</sup> With the 1.3 FTE allocated to CMS, they are expected to provide support to four working groups under the mandate of the Scientific Council (Aquatic Mammals, Aquatic Wild Meat, Joint Noise, and Culture) and the work of the five aquatic-related COP-appointed Councilors (Marine Fish, Freshwater Fish, Aquatic Mammals, Bycatch, and Marine Pollution), as well as oversee and coordinate three MOUs (Marine Turtles of the Atlantic Coast of Africa, Manatee and Small Cetaceans of Western Africa and Macaronesia, and Cetaceans and their Habitats in the Pacific Islands Region), numerous single species action plans (e.g., Loggerhead turtle in the South Pacific Ocean Atlantic humpback dolphin; hawksbill sea turtle, angelshark, and cetaceans in the Red Sea) and concerted actions (Franciscana dolphin, humpback whales, sperm whales, blue shark, and common guitarfish).<sup>402</sup> Moreover, they help facilitate implementation of numerous resolutions and decisions, including those on bycatch,<sup>403</sup> fish aggregating devices,<sup>404</sup> marine pollution,<sup>405</sup> marine noise,<sup>406</sup> vessel strikes,<sup>407</sup> recreational in-water

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support the effective functioning of the CMS subsidiary bodies, and equip the CMS Secretariat with adequate resources to carry out its significant mandates.

CMS Secretariat, *Budget for 2024–2026 and Programme of Work for the Intersessional Period between COP14 and COP15*, UNEP/CMS/COP14/Doc. 13.2/Rev.1, ¶ 1 (2024).

<sup>400</sup> See *id.* ¶ 26.

<sup>401</sup> See *id.* at ¶ 25.

<sup>402</sup> See *id.*

<sup>403</sup> UNEP/CMS/Res. 12.22, *supra* note 20; CMS, Decision 14.34, UNEP/CMS/Decisions COP14, at 17 (2024).

<sup>404</sup> CMS, Decision 14.37, UNEP/CMS/Decisions COP14, at 20 (2024).

<sup>405</sup> CMS, Decision 14.43, UNEP/CMS/Decisions COP14, at 21–22 (2024).

<sup>406</sup> CMS, Decision 14.47, UNEP/CMS/Decisions COP14, at 24 (2024).

<sup>407</sup> CMS, *Reducing the Risk of Vessel Strikes for Marine Megafauna*, UNEP/CMS/Res. 14.5 (2024); CMS, Decision 14.50, UNEP/CMS/Decisions COP14, at 26 (2024).

interactions,<sup>408</sup> important marine mammal areas,<sup>409</sup> import shark and ray areas,<sup>410</sup> seagrass ecosystems,<sup>411</sup> conservation priorities for cetaceans,<sup>412</sup> and much more.<sup>413</sup>

Despite this massive workload for just 1.3 FTE, the parties rejected the Secretariat's proposal to fund the additional staff person for the Aquatic Species Team. Their rejection is difficult to comprehend in light of their willingness to adopt additional work for the Secretariat to perform on their behalf. Clearly, the willingness to adequately fund the Secretariat's work undermines the Convention, as work delegated to the Secretariat to help protect migratory species goes unperformed. Many other tasks, including those necessary to achieve the goals of action plans, are subject to the availability of external funding, thus requiring the Secretariat to spend time raising funds to perform those tasks.<sup>414</sup> A treaty that has been underfunded for its entire existence cannot hope to fulfill its goals if the parties refuse to provide funds commensurate with the tasks it agrees to undertake. In fact, CMS-listed fish species show an average negative change in relative abundance of 90%.<sup>415</sup>

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<sup>408</sup> CMS, *Recreational In-water Interaction with Aquatic Wildlife*, UNEP/CMS/Res. 12.16 (Rev.COP14) (2024); CMS, Decision 14.56, UNEP/CMS/Decisions COP14, at 28 (2024).

<sup>409</sup> UNEP/CMS/Res. 12.13, *supra* note 187; CMS, Decision 14.60, UNEP/CMS/Decisions COP14, at 29 (2024).

<sup>410</sup> CMS, *Important Shark and Ray Areas (ISRAs)*, UNEP/CMS/Res. 14.7 (2024); CMS, Decision 14.64, UNEP/CMS/Decisions COP14, at 30 (2024).

<sup>411</sup> CMS, *Conservation and Sustainable Management of Seagrass Ecosystems*, UNEP/CMS/Res. 14.8 (2024); CMS, Decision 14.68, UNEP/CMS/Decisions COP14, at 31 (2024).

<sup>412</sup> CMS, *Conservation Priorities for Cetaceans*, UNEP/CMS/Res. 14.9 (2024); CMS, Decision 14.73, UNEP/CMS/Decisions COP14, at 33 (2024).

<sup>413</sup> *See, e.g.*, CMS, *Management of Marine Debris*, UNEP/CMS/Res. 12.20 (2017); CMS, Decision 14.53, UNEP/CMS/Decisions COP14, at 27 (2024) (deep seabed mining).

<sup>414</sup> *See, e.g.*, CMS, Decision 14.155, UNEP/CMS/Decisions COP14, at 59 (2024) (directing the Secretariat, "subject to external funding, [to] support the implementation of capacity-building activities aimed at providing support to the West African Range States in implementing the Vulture [Multi-species Action Plan]").

<sup>415</sup> *See* DAVIS ET AL., *supra* note 1, at 17.

The lack of adequate funding is certain to impede the Convention's ability to prepare Agreements or action plans for listed species. In the past, the parties allocated specific amounts of money to implement MOUs. The budget for the 2003–2005 triennium, for example allocated \$30,000 to the Great Bustard MOU, with another \$90,000 allocated for a meeting of the Sahelo-Saharan Range States.<sup>416</sup> At COP8, the parties halved the amounts allocated to Agreements for the 2006–2008 triennium,<sup>417</sup> and since 2014 the budget has contained no line items for implementation of MOUs, although it recognizes that the CMS Secretariat will continue to provide support for several MOUs.<sup>418</sup>

Remarkably, despite the unwillingness of the parties to fund the Secretariat's current work at adequate levels, the parties have set a target to ensure that "all migratory species with an unfavourable conservation status are listed in CMS Appendices and are covered by an effectively implemented CMS Instrument and/or Concerted Action."<sup>419</sup> This target returns the Convention to its roots, seeking to cover all Appendix II species with an Agreement. Yet, the target is nothing but fantasy without a budget to support such ambition.

#### D. Arrangements for Meetings of the Conference of the Parties

The parties must improve the arrangements for meetings of the Conference of the Parties. Currently, after a brief meeting in plenary, the parties break into the Committee of the Whole (COW) where most documents, including proposals to include species in the appendices, are introduced. However, during breaks in the COW sessions—lunch and evenings—the parties meet simultaneously in taxonomic working groups (aquatic, terrestrial, and avian) to discuss proposals and other documents associated with those groups, as well as another working group to consider the budget and yet another to

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<sup>416</sup> CMS. *Financial and Administrative Matters*, UNEP/CMS/Res. 7.11, Annex (2002).

<sup>417</sup> *An Assessment of MOUs*, *supra* note 262, at 27; *Developing, Resourcing and Servicing CMS Agreements*, *supra* note 259, ¶ 3.8.

<sup>418</sup> See *Financial and Administrative Matters*, *supra* note 279, ¶ 28.

<sup>419</sup> *Samarkand Strategic Plan for Migratory Species 2024–2032*, *supra* note 34, at 4.

discuss cross-cutting and institutional issues, such as national legislation, climate change, and illegal taking of migratory species.<sup>420</sup>

Many delegations, however, comprise just one or two individuals.<sup>421</sup> Obviously, they cannot participate in all five working groups. Thus, when the issues return to the COW, almost always as a revised document that incorporates the working group's revisions, a party that has been unable to participate in that working group may propose additional revisions. In addition, even if a party was in attendance, it may propose additional changes on the floor because it was not able to participate effectively since working group meetings are conducted in English without interpretation into the working languages of CMS (English, French, and Spanish). The Secretariat must then revise again that document for presentation to the COW. The chair may also create ad hoc working groups to resolve difficult issues that can be resolved by a small number of parties. At COP14, the COW chair also directed parties to submit their comments on documents discussed in the Committee and that did not appear to require major changes directly to the Secretariat for compilation and presentation to the parties as a revised document. In 2024, sixty-two documents came back to the COW as revised documents for reconsideration, with many documents revised multiple times.<sup>422</sup> For parties, which must review and decide whether to adopt, further revise, or reject documents, the workload is untenable, particularly for delegations of one or two representatives. For Secretariat staff, who must process and translate each revision into the working languages of the Convention so that the parties have at least one session to review any changes, the workload is also untenable.

This highly inefficient system must change, particularly in light of the Convention's growing agenda and increasing number of parties. Consider, for example, the growth of the agenda over the last fifteen years. At COP11, the sixty-three parties present considered fifty documents that required some form of decision-making in

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<sup>420</sup> See *Report of the 14th Meeting*, *supra* note 95, ¶ 57.

<sup>421</sup> See *Report of the 14th Meeting*, *supra* note 95, Annex 5: List of Participants.

<sup>422</sup> See CMS Secretariat, List of In-Session Documents for Fourteenth Meeting of the Conference of the Parties, <https://www.cms.int/meeting/fourteenth-meeting-conference-parties-cms#in-session-documents> [https://perma.cc/K4CW-JLKW] (last visited Nov. 17, 2025).

addition to twenty species proposals.<sup>423</sup> In 2024 at COP14, seventy-four parties considered eighty-two documents and fourteen species proposals.<sup>424</sup> The numbers mask, however, the increased complexity of the documents. In 2024, most of the documents had reports, annexes, and action plans for the parties to consider, as well as new or revised decisions and resolutions. For example, the document on *Recreational In-water Interactions* asked the parties to consider (1) adopting draft amendments to Resolution 12.16; (2) endorsing, as part of the draft amendments to Resolution 12.16, the *Guidelines for Recreational In-water Interactions with Marine Wildlife*; (3) adopting six new draft Decisions; and (4) deleting several Decisions considered to be completed.<sup>425</sup>

Bear in mind, also, that a CMS meeting of the COP has been limited to six days due to financial constraints. Similar meetings, such as those of CITES, take place over ten working days with a weekend in between to allow both Secretariat staff and parties to work at a more reasonable pace. Moreover, CITES meetings take place in two committees meeting simultaneously and with simultaneous interpretation, thus increasing participation by parties and reducing further revisions by parties unable to participate in the committees. CITES parties thus had just twenty-seven revised documents to consider in 2022<sup>426</sup> and forty in 2019.<sup>427</sup>

Like CITES, CMS should break into two committees. The first committee would discuss species-related issues—the issues that are now routed to the three taxonomic working groups. The second

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<sup>423</sup> COP11 was attended by sixty-three parties and five non-parties. See CMS, *Proceedings of the 11th Meeting of the Conference of the Parties*, UNEP/CMS/COP11/Proceedings, ¶ 3 (2015). For the number of documents, see CMS, *Eleventh Meeting of the Conference of the Parties, Conference Documents*, at <https://www.cms.int/en/meeting/eleventh-meeting-conference-parties-cms> [<https://perma.cc/J6M5-ZP9K>].

<sup>424</sup> COP14 was attended by 74 of 132 parties in addition to 5 non-parties and dozens of inter-governmental and non-governmental organizations. *Report of the 14th Meeting*, *supra* note 95, ¶¶ 4, 5; Annex 5.

<sup>425</sup> CMS, *Recreational In-water Interactions*, UNEP/CMS/COP14/Doc. 27.3.1 (Rev.) (2024).

<sup>426</sup> See CITES, *Nineteenth Meeting of the Conference of the Parties, In-Session Documents*, at <https://cites.org/eng/cop/19/in-session-documents>.

<sup>427</sup> See CITES, *Eighteenth Meeting of the Conference of the Parties, In-Session Documents*, at <https://cites.org/eng/cop/18/com/index.php>.

committee would discuss implementation issues, including finance. Importantly, these meetings would include simultaneous interpretation into the three working languages of the convention. This approach would allow far greater participation by all parties. It would also provide relief to the small staff of the Secretariat who would spend less time revising—and translating into the three working languages of the Convention—multiple iterations of the same document.

Notably, meetings of the CMS Conference of the Parties have broken out into full committees in the past, although whether these occurred consecutively or simultaneously is not clear. For example, at COP3, the meeting broke into Committees I (Scientific), II (Legal), and III (Administrative).<sup>428</sup> At COP4, the meeting broke into two committees, Committee I (Scientific) and II (Administrative).<sup>429</sup>

The efficiency gained from splitting into two committees, of course, comes at a cost. The meeting venue must have two rooms large enough to accommodate all parties rather than just one. In addition, with simultaneous interpretation into three languages, the parties must finance six additional interpreters (two for each language) at a cost likely to exceed \$300,000.<sup>430</sup> Yet, this is money worth spending if the parties wish to achieve greater conservation benefits from CMS.

#### CONCLUSION

In 2010, a group of scholars opined that, “[d]espite the potential of [CMS] for provision of comprehensive protection of endangered migratory species, this potential is currently far from fully realized . . .”<sup>431</sup> Fifteen years later, CMS has done much to reach its potential.

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<sup>428</sup> See *Proceedings of the Third Meeting of the Conference of the Parties*, *supra* note 250, ¶¶ 30–46.

<sup>429</sup> See CMS, *Proceedings of the Fourth Meeting of the Conference of the Parties*, UNEP/CMS/Conf.4.16, 46–59 (1994).

<sup>430</sup> The approved CMS budget for the 2024–2026 triennium provides for €345,814 (about \$376,900) for translation of documents and interpretation in 2026 when the next meeting of the COP will occur. *Financial and Administrative Matters*, *supra* note 279, annex 1. Since most translation is done by CMS staff, the majority of this amount is for interpretation.

<sup>431</sup> PATRICIA BIRNIE ET AL., *INTERNATIONAL LAW AND THE ENVIRONMENT* 684 (3d ed. 2009).

The National Legislation Programme and Review Mechanism are helping to improve domestic implementing legislation, particularly as it relates to Appendix I endangered species.<sup>432</sup> The parties have adopted numerous resolutions to implement the requirements of Article III(4) to conserve and restore habitat, remove obstacles to migration, prevent and control factors that may endanger Appendix I species.<sup>433</sup> The parties have also adopted numerous Agreements to restore and maintain a favourable conservation status for species included in Appendix II.<sup>434</sup> When the parties became hesitant to adopt additional Agreements with the necessary institutional machinery to implement them, they pivoted towards adoption of action plans, which are typically the key conservation outcome of Agreements.<sup>435</sup>

The main weakness of CMS has always been the unwillingness of the parties to fund at adequate levels the necessary work to conserve migratory species.<sup>436</sup> Even as the parties balked at concluding new Agreements and pivoted towards more informal action plans, those action plans are not cost free. The parties must meet to negotiate new action plans, and the Secretariat must engage with parties to implement them. Some parties may need capacity building to be able to implement them. All this requires additional funding. Even before the adoption of new action plans at the last three COPs, one 2014 report noted that “[t]he main threat to viability [of MOUs] that rely on the CMS Secretariat is the dwindling financial and human resource . . .”<sup>437</sup> If existing MOUs are struggling to fulfill their potential with current funding levels, it is not possible that the parties can achieve their goal by 2032 to conclude—much less implement—new CMS legal instruments for all Appendix II species with an unfavourable conservation status.<sup>438</sup> The goal is certainly consistent with the drafter’s intent, but it is wildly inconsistent with current funding levels.

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<sup>432</sup> See *supra* Parts II.A, II.D.

<sup>433</sup> See *supra* Part II.B.

<sup>434</sup> See *supra* Part II.C.1.

<sup>435</sup> See *supra* Part II.C.5.

<sup>436</sup> See *supra* Part III.C.

<sup>437</sup> *Developing, Resourcing and Servicing CMS Agreements*, *supra* note 259, at annex 1, ¶ 4.15.

<sup>438</sup> See *Samarkand Strategic Plan for Migratory Species 2024–2032*, *supra* note 34, at Annex, Target 1.1.

The failure to adequately fund the Convention also makes it far more difficult for the parties to meet the challenges of climate change, especially those that directly impact the Convention's success.<sup>439</sup> Species are shifting ranges and making other behavioral adaptations as the planet rapidly changes. That requires parties to invest more in research to understand the needs of migratory species. Institutionally, the lack of adequate funds also makes it far more difficult for the parties to participate fully and meaningfully in COPs.<sup>440</sup> As the number of parties and the depth of the Convention's programmatic work has grown, the current arrangements for COPs—taking place over just six days with five working groups meeting simultaneously and without simultaneous translation—has become inadequate.<sup>441</sup> The inadequate meeting arrangements will grow if the parties achieve their goal to increase membership to 160 parties, although additional parties may provide room for a larger budget by reducing the amount that each party must contribute, particularly if those new parties include the United States and other developed States.<sup>442</sup>

The *State of the World's Migratory Species* concludes that “[m]igratory species are exposed to a diverse range of anthropogenic pressures that are driving population declines,” including habitat loss, degradation and fragmentation; overexploitation; climate change; and pollution.<sup>443</sup> It concludes that “urgent” action is needed to reverse species declines by protecting habitats, preserving “the phenomenon of migration itself,” and addressing specific threats.<sup>444</sup> Achieving those goals requires boots on the ground—that is, people to identify habitats to be conserved, people to restore habitats, people to improve legislation, and people to monitor the health of migratory species and their habitats. But it also requires hands in the wallet. None of these crucial actions that are deeply necessary to protect migratory species are free. After a long slumber, yes, CMS

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<sup>439</sup> See *supra* Part III.C.

<sup>440</sup> See *supra* Part III.D.

<sup>441</sup> See *id.*

<sup>442</sup> See *Samarkand Strategic Plan for Migratory Species 2024–2032*, *supra* note 34, at Annex, Target 6.3 (setting a target to increase the number of CMS parties from 133 to 160 by 2032).

<sup>443</sup> DAVIS ET AL., *supra* note 1, at 55.

<sup>444</sup> *Id.*

is awake. But, for CMS to fulfill its potential, governments must be willing to pay for it.

