

Convention on the Conservation of Migratory Species of Wild Animals



5th Meeting of the Sessional Committee of the CMS Scientific Council (ScC-SC5)

Online, 28 June - 9 July 2021

UNEP/CMS/ScC-SC5/Report

REPORT OF THE MEETING

I. OPENING OF THE MEETING AND ORGANIZATIONAL MATTERS

ITEM 1. OPENING OF THE MEETING

- 1. Ms. Narelle Montgomery, Chair of the CMS Scientific Council (ScC) and of its Sessional Committee (ScC-SC) welcomed participants, including Committee members, other members of the Scientific Council and other observers, to the 5th meeting of the Committee, which was also the first to be held virtually using an online conference platform. She acknowledged the Traditional Owners of Country on which the meeting was taking place, and particularly welcomed new Committee members. She thanked the Committee for electing her, and her region, Oceania, as Chair, and Fernando Spina, her predecessor, for steering the Committee successfully through a period of change. She said she would welcome a strategic, prioritized approach to the Committee's work, and noted that the current meeting would set the direction of intersessional work between COP13 and COP14.
- 2. Ms. Amy Fraenkel, Executive Secretary of CMS, warmly welcomed all participants. The Sessional Committee was engaged in significant work related to the work of the ScC following COP13, and important activities included the Migratory Species Conservation Status Report, supported financially by the governments of Switzerland, the United Kingdom (UK) and Australia, work on light pollution, supported by the German Federal Ministry of the Environment, Nature Conservation and Nuclear Safety (BMU), work on Climate Change, supported by the UK Joint Nature Conservation Committee, and the Wildmeat Report, supported by BMU and the government of Norway. Ms. Fraenkel drew special attention to the topic of wildlife diseases and noted the timeliness of the meeting in relation to discussions in a number of fora of the post-2020 Global Biodiversity Framework. She closed her remarks by thanking BMU for their in-kind provision of interpreters for the meeting, and paid tribute to CMS staff members Mr. Robert Vagg and Mr. Nick Williams, who had passed away since COP13.

ITEM 2. ADOPTION OF THE AGENDA AND MEETING SCHEDULE

Item 2.1 Provisional Agenda and Documents and 2.2 Provisional Annotated Agenda and Meeting Schedule

- 3. Mr. Marco Barbieri (Secretariat) introduced documents UNEP/CMS/ScC-SC5/Doc.2.1/Rev.1 *Provisional Agenda and Documents* and UNEP/CMS/ScC-SC5/Doc.2.2, *Provisional Annotated Agenda and Meeting Schedule*. He highlighted key elements related to the online nature of the meeting and explained the working arrangements.
- 4. The Chair emphasized that there was flexibility in the agenda and working arrangements and encouraged participants to register for as many Working Group meetings as they had time for.

- 5. Following an intervention from Mr. James Williams (ScC-SC alternate member for the European Region) requesting clarification about the process of invitation to Working Group meetings, the meeting adopted the agenda and schedule.
- 6. Ms. Maria Jose Ortiz (Secretariat) introduced document UNEP/CMS/ScC-SC5/Inf.10 *Guidance* on the Application of the Rules of Procedure in the 5th Meeting of the Sessional Committee of the Scientific Council, explaining how the Rules applying to the meeting would be affected by its virtual setting.
- 7. The Chair pointed out that the modifications were straightforward, and the meeting took note of the Rules of Procedure without objection, including the provisions for the virtual setting.

II. STRATEGIC AND INSTITUTIONAL MATTERS

ITEM 3. PROGRAMME OF WORK FOR THE SESSIONAL COMMITTEE OF THE SCIENTIFIC COUNCIL FOR THE INTERSESSIONAL PERIOD BETWEEN COP13 AND COP14

8. This item was dealt with in plenary on 28 June and 8 and 9 July and discussed in Working Groups on 1, 2, 5, 6 and 7 July.

Plenary of 28 June

- 9. Mr. Marco Barbieri (Secretariat) introduced document UNEP/CMS/ScC-SC5/Doc.3 Programme of Work for the Sessional Committee of the Scientific Council for the Intersessional Period between COP13 and COP14 and its Annex and briefed the meeting on the process for the further development, finalization and adoption of the Programme of Work. The Annex comprised a tabulated template in five parts (parts A to E), based on the mandate of the Scientific Council as set out in Decisions and Resolutions of previous COPs, and pre-populated in consultation with Standing Committee members. The contents of the Annex should be regarded as suggestions to provide a basis for discussion. Working Group participants should consider additional issues arising since COP13 that fell within the mandate of the Scientific Council, including a renewed focus on wildlife disease, and matters such as the implications of the recent update of IUCN Red List assessment of the African Elephants. The Annex part A included two items, cooperation with the Intergovernmental Science Policy Platform on Biodiversity and Ecosystem Services (IPBES), and definitions of the terms 'Range State' and 'vagrant'. These two items would be covered under standalone items in the agenda, and the Programme of Work would be revised depending on the outcomes of discussions under these items as presented to the final plenary sessions. The Annex parts B to E would be considered in detail by the Working Groups.
- 10. The Chair stressed the importance when reviewing the proposed work programme of focussing on whether there were any gaps, and on what should be the priorities. Flexibility in dealing with issues that arose intersessionally should be an important part of the SC's approach.
- 11. It was noted that the term 'subject to the availability of resources' appeared many times in the Annex. Part of the job of the Sessional Committee in this meeting would be an honest appraisal of the availability of resources, and identification of responsibility for finding missing resources. It was also noted that the tasks in the workplan were given priority ratings, but that none of the tasks had a priority assessed as 'low'. It was asked whether the Working Groups should review the priority ratings, and if so, what criteria should be used.
- 12. The Chair agreed that prioritization of work was very important and considered the assigning of leads to be a critical function for participants to discuss.

- 13. The Secretariat confirmed that in compiling the draft Programme of Work, all the identifiable mandates to the Scientific Council from the COP, either through Decisions or specific provisions in Resolutions, had been considered. It was important to be realistic and to indicate to the Secretariat where the priorities were. These indications could then be used as an element in fundraising. It was not normally the role of the Scientific Council to raise funds, but Council members had achieved this in the past through their contacts. The Secretariat had limited possibilities to raise funds, and the priorities from the Scientific Council were therefore important to guide the Secretariat in this regard. Providing a ranking of priority of tasks in the workplan was therefore one of the key functions this meeting could play.
- 14. The Chair agreed, adding that it would be useful when reviewing the Programme of Work to indicate activities for which funding had already been secured, and those that were a high priority that still required funding.
- 15. Mr. Barbieri pointed out that the tabular format used to present the Programme of Work provided a flexible overview and was easy to use, but nevertheless had limitations in the amount of information that could be presented. Some elements such as Terms of Reference and scoping documents that were an important part of implementation had to be recorded outside the tabular format. He saw the possibility of discussion on the prospects of implementation of certain activities that might not appear in the table. Such activities should be included in the Working Group reports to the final plenary.
- 16. Ms. Melanie Virtue (Secretariat) outlined the general principles for the establishment and operation of the Working Groups. Participation was possible in two ways: by joining an online meeting on Microsoft Teams, and by commenting on documents. Participants needed to be registered as a Working Group member to participate in either way, and could join as many groups as they wished, subject to the requirement for balance between governmental and non-governmental participation, detailed in Rule 19 of the Rules of Procedure.

Plenaries of 8 and 9 July

17. In the final plenary sessions on 8 and 9 July 2021, Working Groups reported on their work on parts B to E of the draft Programme of Work and presented CRP documents for approval.

Part A

- 18. Part A of the draft Programme of Work covering Strategic, Institutional and Legal matters had been updated by the Secretariat based on the outcomes of the discussion of relevant agenda items (1. IPBES; 2. Decision 13.140 on definition of Range State and Vagrant; 3. Disaggregation of higher avian taxa on Appendix II).
- 19. In the final plenary session on 9 July 2021, the Committee agreed with the minor amendments to points 1. and 2., and of the inclusion of point 3. in this section of the Plan of Work, and approved document UNEP/CMS/ScC-SC5/CRP3/A.

Part B

- 20. Mr. Barry Baker (Chair, Aquatic Species Working Group) reported that the Working Group had reviewed the Aquatic Species Conservation Issues in the Programme of Work contained in document UNEP/CMS/ScC-SC5/Doc.3/Annex/Part B. The group had made minor amendments to the document and discussed progress with activities since COP13. Details were included in the Working Group report available on the meeting website and in document UNEP/CMS/ScC-SC5/CRP3/B.
- 21. Emerging issues to be considered for addition to the draft Programme of Work included work on migratory freshwater fish in South America, and the draft portfolios of incoming Scientific Councillors for Marine Pollution and Marine Fish.

- 22. An issue of great concern was the illegal killing and mutilation of seabirds in the south-west Atlantic Ocean. While the issue had been known of for over twenty years, the nature and scale of it had been revealed in a recent paper by Gianuca *et al.* (2020)¹. A wide variety of species were affected, including many listed on the CMS Appendices. The Aquatic Species Working Group had recommended the establishment of an Intersessional Working Group on Mutilation of Seabirds, in cooperation with ACAP, and had developed draft Terms of Reference for the group.
- 23. Finally, the Working Group had recommended that relevant Information documents should be included in the Agenda of future Scientific Council Sessional Committee meetings, as already happened for some of the CMS daughter agreements, to assist Committee members in their preparation for discussions.
- 24. Ms. Patricia Serafini (ScC-SC member for the South & Central America and the Caribbean) made a statement about the illegal killing and mutilation of seabirds in the south-western Atlantic Ocean. She stressed that in Brazil, any cruelty to wild and domestic animals was a crime under the environmental crimes law 9605/98. Punishments were strict but enforcement was weak. The issue was already included in discussions under ACAP and a paper recommending action had been submitted to the August meeting of the Seabird Bycatch Working Group.
- 25. The proposed Intersessional Working Group of the Scientific Council would be asked to consider expanded data collection by on board observer programmes, emphasis on best-practice guidelines on safe handling of live-caught seabirds, further study of the issue, especially in regions beyond the south-west Atlantic, and further surveillance and enforcement actions. Despite the existence of mitigation, training, education and outreach activities, including two national plans of action, illegal practices remained undocumented and were likely to resume in the absence of on-board observers.
- 26. There had been extensive monitoring and rehabilitation of stranded seabirds along the Brazilian coast in the most recent 10 years, and it was hoped that activities to mitigate this issue could be successfully implemented.
- 27. The Chair stressed that the Committee was there to help, and that the establishment of an Intersessional Working Group would be a good way forward.
- 28. Mr. Williams expressed concern that the Terms of Reference referred to including 'local authorities' under recommendation a) and said that if this meant authorities at a sub-national level, it would involve a very large number of authorities.
- 29. The Chair agreed that this might be a concern and recommended cooperation with focal points at national level.
- 30. The Chair concluded by confirming approval by the Committee of the revised Programme of Work for the Aquatic Species Working Group (document UNEP/CMS/ScC-SC5/CRP3/B), the establishment of an Intersessional Working Group on Mutilation of Seabirds, and the draft Terms of Reference for this Group (document UNEP/CMS/ScC-SC5/CRP3/B/Rev.1/Annex).

_

¹ Gianuca, D, Bugoni, L, Jiménez, S, & 10 others. 2020. Intentional killing and extensive aggressive handling of albatrosses and petrels at sea in the southwestern Atlantic Ocean. Biological Conservation. DOI: https://doi.org/10.1016/j.biocon.2020.108817

Part C

- 31. Mr. Alfred Oteng Yeboah (Chair, Terrestrial Species Working Group) reported that the Working Group had reviewed the components of the Programme of Work contained in document UNEP/CMS/ScC-SC5/Doc.3/Annex/Part C relating to terrestrial species and discussed additional issues that had become priorities since COP13. The group had made amendments to the document and discussed progress with activities since COP13. Details were included in the Working Group report available on the meeting website and in document UNEP/CMS/ScC-SC5/CRP3/C.
- 32. With reference to the CAMI Programme of Work Activity 29.12, the Group agreed that the CAMI Range States should nominate a mammal expert to support discussions at the Scientific Council.
- 33. During discussions of CAMI, it had been noted that activities under Resolution 11.24 (Rev.COP13) covered the Asiatic Cheetah Acinonyx jubatus venaticus. Information document UNEP/CMS/ScC-SC5/Inf.8, Conservation of the Cheetah (Acinonyx jubatus) in Asia and Northeastern Africa had provided information on the need for a coordinated conservation strategy for Cheetah across the entire north-eastern African and western and southern Asian region that included Acinonyx jubatus soemmeringii in north-eastern Africa. The Group had agreed that an Intersessional Working Group on conservation of the Asiatic and north-eastern African Cheetah should be established and had developed draft Terms of Reference that were submitted to Plenary in document UNEP/CMS/ScC-SC5/CRP3/C/Annex for consideration.
- 34. The Group had, under the mandate given to the Council through Convention Article VIII(5)(d) on making recommendations to the COP as to specific conservation and management measures to be included in agreements on migratory species, considered conservation actions for the Jaguar (*Panthera onca*), concluding that activities should be synergized with CITES processes and the Jaguar 2030 Roadmap, with clear actions agreed for Jaguar conservation.
- 35. The Chair concluded by confirming the Committee's approval of the revised Programme of Work for the Terrestrial Species Working Group contained in document UNEP/CMS/ScC-SC5/CRP3/C, of the establishment of an Intersessional Working Group on Asiatic Cheetah, along with the Terms of Reference contained in document UNEP/CMS/ScC-SC5/CRP3/C/Annex Terms of Reference for the Intersessional Working Group on the Asiatic Cheetah.

Part D

- 36. Mr. Rob Clay (Chair, Avian Species Working Group) reported that the Working Group had reviewed the components of the Programme of Work contained in document UNEP/CMS/ScC-SC5/Doc.3/Annex/Part D relating to avian species and discussed additional issues that had become priorities since COP13.
- 37. The group had made amendments to Part D of the Annex to the document and discussed progress with activities since COP13. Details could be found in the Working Group report available on the meeting website, and in document UNEP/CMS/ScC-SC5/CRP3/D. Highlights included that funding for the African-Eurasian Migratory Landbirds Action Plan (AEMLAP) had been secured from the government of Switzerland, and a coordination unit had been established at the Swiss Ornithological Institute.
- 38. The Chair of the Flyways Working Group, Mr. Taej Mundkur, had stepped down after three triennia, and been replaced by Mr. Rob Clay. It was hoped that collaboration and linkages with the Americas Flyways Framework Task Force could be strengthened, and that the Central Asian Flyway Action Plan could be resuscitated, with support from the CMS Secretariat and the Working Group. Another major concern, reflected in Decisions 13.29 and 13.30 concerned Illegal Killing of Birds in the Mediterranean, and the illegal use of mist nets.

- 39. Emerging issues to be considered for addition to the draft Programme of Work related to:
 - 1) the establishment of an East-Asian Australasian Task Force on Illegal hunting, taking and trade of migratory birds, similar to that established in the Mediterranean, both under the mandate of Resolution 11.16 (Rev. COP13);
 - support for implementation of the Action Plan under the MOU on the Conservation of Southern South American Migratory Grassland Birds and their Habitats under the Programme of Work on Migratory Birds and Flyways (2014-2023), annexed to Resolution 12.11 (Rev. COP13);
 - 3) support for intersessional efforts led by the Aquatic Species Working Group related to the illegal killing and mutilation of seabirds in the south-west Atlantic, as reported by Ms Serafini.
- 40. Mr. Clay ended his report by highlighting the need to avoid an excessive workload for the Working Group through careful prioritization and clarity regarding expectations from the COP about intersessional activities in the areas of existing Programmes of Work, Action Plans and reporting obligations.
- 41. The Chair concluded by confirming the approval of the Sessional Committee of the revised Programme of Work for the Avian Species Working Group contained in document UNEP/CMS/ScC-SC5/CRP3/D.

Part E

- 42. The components of the Programme of Work concerning cross-cutting conservation issues contained in document UNEP/CMS/ScC-SC5/Doc.3/Annex/Part E were reviewed by the Cross-cutting Conservation Issues Working Group at its meetings on 2 and 7 July 2021, with the exception of issues concerning connectivity, which were reviewed by the Contact Group on the CMS contribution to the post-2020 Global Biodiversity Framework.
- 43. Mr. Spina (chair, Contact Group on the CMS contribution to the post-2020 Global Biodiversity Framework), reported that the Contact Group had considered two in-session documents, UNEP/CMS/ScC-SC5/CRP3/E/Annex 1, *Elements for Terms of Reference for activities concerning connectivity of the Sessional Committee's Programme of Work,* and UNEP/CMS/ScC-SC5/CRP3/E/Annex 2, *ToR for a Working Group on ecological connectivity* that had been produced by the Secretariat on the basis of the mandate provided by Decision 13.114. The suggested elements would be a basis for seeking funding as well as developing the work itself.
- 44. Support was expressed for the direction this was taking, including the overall emphasis on ecological processes and the functional (not only structural) aspects of connectivity, but caution would be required to keep work well-focused and realistic.
- 45. It had been suggested that work on social learning and animal culture could be brought into the Convention's task concerning connectivity and resilience. The Secretariat had recently received a pledge from the Government of Switzerland for two of these activities.
- 46. The only changes made to the Sessional Committee's Programme of Work on connectivity reflected the development of these elements for Terms of Reference and the funding secured so far. The Group also looked forward to future work being undertaken by a proposed Scientific Council Working Group on Ecological Connectivity and provided input to a draft of the Terms of Reference for such a Group.
- 47. Mr. Spina stressed that connectivity was becoming an important component of external discussions, especially with CBD, and that the Working Group would provide a means to steer activities of different components within the CMS family.

- 48. The Chair agreed that connectivity was highly topical and relevant to the mandate of CMS, and that an Intersessional Working Group offered a means of support for the Programme of Work.
- 49. Ms. Amy Fraenkel (CMS Executive Secretary) considered connectivity to be the right issue at the right time and noted the tremendous sense of collegiality within the CMS family with regard to the role of connectivity in the post-2020 Global Biodiversity Framework. Connectivity was a vital element of the CMS mandate of protecting Migratory Species and helping Parties with their efforts on the ground was critically important.
- 50. During the discussion, changes were suggested to the wording in document UNEP/CMS/ScC-SC5/CRP3/Annex 1 in the section under Decision 13.114 A c), where references to 'ecosystem resilience' would be improved by referring instead to 'ecosystem resilience and integrity'.
- 51. The Chair pointed out that this could not be changed in the text of the mandate itself (the second column) but said that the two instances in the right hand column would be changed as suggested.
- 52. The Chair concluded by confirming approval by the Committee of the Sessional Committee's Programme of Work on connectivity contained in document UNEP/CMS/ScC-SC5/CRP3/E. The Committee also approved elements for Terms of Reference for activities concerning connectivity of the Sessional Committee's Programme of Work contained in document UNEP/CMS/ScC-SC5/CRP3/E/Annex1, and the establishment of the Scientific Council Working Group on Ecological Connectivity, and the endorsement of its Terms of Reference which were contained in document UNEP/CMS/ScC-SC5/CRP3/E/Annex2.
- 53. Mr. Colin Galbraith (chair, Cross-cutting Issues Working Group), reported on the deliberations of the Working Group on the other components of Part E of the Programme of Work. He noted that several activities had been considered under relevant stand-alone agenda items, the activities included in the PoW reflect the outcome of the discussion under those agenda items.
- 54. In relation to Decision 13.105 Conservation implications of animal culture and social complexity, the meeting received an update on progress in the activities of the Working Group on Animal Culture and Social Complexity by the chair of the Working Group. A workshop scheduled in 2021 had been rescheduled for 2022. A full report on the activities of the group was expected to be made to the 6th meeting of the Sessional Committee. The Group had stressed the importance of this workstream, and expressed full support to it.
- 55. In relation to Decision13.121 Community participation and livelihoods, the Working Group had noted that the specific input of the Scientific Council to this workstream, as mandated by the COP, was dependent on the availability of a compilation of case studies that could not be undertaken so far due to lack of funds. The Secretariat was encouraged to keep seeking funding for this workstream.
- 56. In relation to Decision 13.123 *Impacts of plastic pollution on aquatic, terrestrial and avian species*, funding has been secured through the "Counter Measures Two" project to advance the work on plastic pollution in the Asia-Pacific region. Full reports on this work were expected to be provided for the next meeting.
- 57. In relation to Decision 13.129 *Insect decline and its threat to migratory insectivorous animal population*, funding had been received from the governments of Australia and Germany to undertake a review of insect decline and its cascading effects on insectivorous migratory species, and the Secretariat requested the working group to help develop a TOR for the review of insect biomass in relation to migratory species. A TOR drafting group was identified to finalize the TOR.

- 58. In relation to Decision 13.136 Sustainable tourism and migratory species, activities were subject to availability of resources, and the group encouraged the Secretariat to continue to keep seeking funding for this workstream. There was a possible opportunity to secure an intern to conduct a literature review of the existing guidelines in order to better document the current gaps and opportunities for CMS. It was recommended to frame this activity within other relevant CMS initiatives, e.g. on sustainable boat-based marine wildlife watching.
- 59. The Chair concluded by confirming the approval of the Sessional Committee of the revised Programme of Work for the Cross-cutting Conservation Issues Working Group contained in document UNEP/CMS/ScC-SC5/CRP3/E.

ITEM 4. ENGAGEMENT IN OTHER PROCESSES

Item 4.1 Cooperation with IPBES

- 60. The item was dealt with and concluded in plenary on 30 June.
- 61. Mr. Marco Barbieri (Secretariat) introduced document UNEP/CMS/ScC-SC5/Doc.4.1, Cooperation with the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), which summarized COP13 requests to the Scientific Council concerning cooperation with IPBES under Resolution 10.8 (Rev.COP13) paragraphs 1 and 8 (addressed to individual Scientific Council members), and Decision 13.12 (addressed to the Scientific Council as a whole). Many Scientific Council members already engaged in IPBES processes, and the Chair of the Scientific Council was a permanent observer at meetings of the IPBES Multidisciplinary Expert Panel (MEP). The Secretariat assisted engagement of Scientific Council members in IPBES processes by monitoring the IPBES calendar and bringing opportunities to provide input to the attention of the Scientific Council members. In addition to these practices, the Sessional Committee might wish to consider further options, for example the submission of consolidated Scientific Council contributions to the review of some IPBES draft assessments, or through participation of Scientific Council members in the dedicated Task Forces and Expert Groups that compiled those outputs. This might be an effective way to ensure that IPBES assessments considered elements that were of interest to CMS. The Sessional Committee was recommended to consider options and make decisions for the further engagement of the Scientific Council in relevant IPBES assessments and other processes, and to make recommendations to its members in this regard.
- 62. The Chair said she had been at the MEP meeting before IPBES-8, where opportunities for potential linkages between IPBES and CMS had been made clear.
- 63. Mr. João Loureiro (ScC-SC member for the European Region) welcomed the document, reported that he had been at the IPBES-8 meeting the previous week, and that CMS had been included in discussion of cooperation with other bodies. A proposal to undertake an assessment on ecological connectivity would be fully discussed at IPBES-9 in 2022, and this would be a good opportunity for Scientific Council input. He suggested that the Secretariat could contact the IPBES Bureau to discuss the best process for this.
- 64. Mr. Barbieri noted the interest of the Sessional Committee and Scientific Council to continue their engagement with IPBES on a similar level as in recent years. As a point of clarification, he mentioned that IPBES and CMS had agreed a Memorandum of Cooperation which included a standing invitation under which members were reciprocally invited to each-others' meetings.
- 65. The Chair concluded the item and saw no need for further discussion in a Contact Group.

Item 4.2 CMS contribution to the post-2020 Global Biodiversity Framework

66. This item was dealt with in plenary on 30 June and 8 July and discussed in a Contact Group on 6 July.

Plenary of 30 June

- 67. Ms. Laura Cerasi (Secretariat) introduced document UNEP/CMS/ScC-SC5/Doc.4.2, CMS Contribution to the Post-2020 Global Biodiversity Framework, which summarized the most recent contributions of CMS to the development of the post-2020 Global Biodiversity Framework (GBF), which was expected to be adopted by CBD COP15 in October 2021. CMS COP13 had adopted the Gandhinagar Declaration, which included a call for a commitment to restoring ecological connectivity as a priority for the post-2020 GBF. Ecological connectivity was reflected in Goal A and targets 1 and 2 of the draft Framework, but the proposed list of indicators did not include any specific headline indicator on ecological connectivity.
- 68. The CMS Secretariat had undertaken work to address the lack of adequate indicators, including holding a dedicated workshop in March 2021, and a meeting of the Working Group on the CMS Family input to the post-2020 GBF. These meetings and additional consultations provided inputs and recommendations which were reflected in submissions to the SBSTTA-24 of CBD and were contained in the Annex of document UNEP/CMS/ScC-SC5/Doc.4.2.
- 69. Four different approaches were suggested to measure various aspects of ecological connectivity:
 - a. Species migration connectivity that could be measured through use of existing global species indices, providing a proxy measure for the status of connectivity.
 - b. Connectedness of landscapes and seascapes / habitats that could be measured through, for example, the adequacy of the coverage and connectivity of protected areas.
 - c. Ecosystem and habitat fragmentation that could be measured through a composite metaindicator reflecting various indices of ecosystem and habitat fragmentation which addressed the corollary of reduced connectivity.
 - d. Policy and management measures supporting ecological connectivity that could be measured through the prevalence of laws, policies, strategies and projects supporting the management, restoration and improvement of ecological connectivity.
- 70. Other indicators of relevance to CMS included those related to Target 4, on the harvesting, trade and use of wild species, which required significant improvement.
- 71. At the recent online session of the CBD SBSTTA-24, there had been no specific discussion on headline indicators, but participants had been able to provide inputs through an online survey. All relevant outcomes of SBSTTA-24 were contained in document UNEP/CMS/ScC-SC5/Inf.9. The results from the online survey and other inputs would be taken into account to update the monitoring framework with a view to issuing a revised version. This would be launched on 12 July and discussed at the Third Meeting of the Open-ended Working Group on the Post-2020 Framework, from 23 August to 3 September 2021.
- 72. In a joint statement, Born Free Foundation, Whale and Dolphin Conservation and Ocean Care expressed support to efforts by CMS to better integrate structural and functional connectivity elements in the post-2020 Global Biodiversity Framework, in particular by addressing the lack of adequate indicators for ecological connectivity in the proposed monitoring framework. They supported the four options proposed in the Annex of document UNEP/CMS/ScC-SC5/Doc.4.2, which focussed on the relevance of connectivity in Goal A on protection of natural ecosystems, T1 on spatial planning, and T2 on Area-Based Conservation Measures of the current draft Global Biodiversity Framework. They also suggested including the importance of connectivity in relation to T3 on active species management, recovery and reducing human-wildlife conflict, and T11 on green/blue spaces for human health and well-being, particularly in urban contexts. Furthermore, they encouraged CMS to not only promote connectivity to the CBD community, but also its work on the importance of cultural and social learning.

73. The Chair established a Contact Group for further discussion. It was agreed that the Contact Group, in addition to discussing matters concerning CMS contribution to the post-2020 GBF, would have considered also issues concerning connectivity.

Plenary of 30 June

- 74. Mr. Fernando Spina (Chair, Contact Group on post-2020 Global Biodiversity Framework and connectivity) reported that the Contact Group had reviewed suggestions made to date by CMS regarding indicators to support the goals and targets in the post-2020 Framework contained in document UNEP/CMS/ScC-SC5/Doc.4.2/Annex. Support was expressed for the approach being taken. Suggestions were made regarding additional indicators worth considering, the interpretation of the term "use", and improved ways of wording the target (4) in the Framework that dealt with harvesting, trade and use. Revised drafts of the Framework and its indicators were due on 12 July 2021: the Secretariat would review them and engage in consultations with the Working Group on the CMS inputs to the post-2020 Framework, of which many Councillors were members, in advance of the next CBD-convened Working Group meeting (OEWG3) in late August.
- 75. The plenary took note of the report and endorsed the recommendations of the Contact Group.

III. INTERPRETATION AND IMPLEMENTATION OF THE CONVENTION

ITEM 5. REVIEW OF THE CONSERVATION STATUS OF MIGRATORY SPECIES

76. This item was dealt with in plenary on 28 June and 9 July and discussed in a Contact Group on 2 July.

Plenary of 28 June

- 77. The Chair introduced this item, remarking that one of the key mandates of the Scientific Council was to monitor the status of all migratory species, and not only those in the Appendices of the Convention.
- 78. Mr. Marco Barbieri (Secretariat) introduced document UNEP/CMS/ScC-SC5/Doc.5/Rev.1 Review of the Conservation Status of Migratory Species and its three Annexes. Decision 13.24 required the Secretariat to further develop a preliminary review of the conservation status of migratory species submitted to COP13, including a review of the conservation status of individual species in the Appendices and an assessment of the impact of direct use on the conservation status of species listed on Appendix I. Decision 13.26 required the Scientific Council to support and guide the Secretariat in activities foreseen in Decision 13.24, and formulate recommendations for COP14. Resources had been raised thanks to the generosity of the governments of Australia, Switzerland and the UK, and UNEP-WCMC had been contracted to undertake some of the activities foreseen by Decision 13.24. As an initial step, the Secretariat and UNEP-WCMC had been working towards the development of a framework, criteria and methodologies to undertake the activities, for which drafts had been submitted to the meeting for review, finalization and endorsement as included in Annexes 1, 2 and 3 of document UNEP/CMS/ScC-SC5/Doc.5/Rev.1. A Contact Group was proposed to discuss how best to integrate these activities into current plans, evaluate the suitability of the proposed approach, and provide guidance for refinement.
- 79. An additional point for discussion concerned the ongoing mandate of the Scientific Council in monitoring the status of Appendix I species and keeping the conservation status of migratory species under review. This was important in particular for monitoring the conservation status of species for which there were no Concerted Actions, Action Plans, or other measures. There might also be a case for including taxa at sub-species or population level for which assessments might not be available.

- 80. The Chair observed that the Scientific Council had an important role to play in monitoring the conservation status of Migratory Species. The process of assessing and reviewing the Appendices would set a good foundation for the Sessional Committee to identify and prioritize the species that required monitoring. She agreed that a Contact Group should be established to discuss the project and the Annexes to document UNEP/CMS/ScC-SC5/Doc.5/Rev.1 in detail.
- 81. In the subsequent discussion, the role of the review in the identification of the management units of species that the Convention was aiming to conserve was highlighted. Cooperation with relevant IUCN Species Specialist Groups and other Multilateral Environmental Agreements was also recommended.

Plenary of 9 July

- 82. Mr. Colin Galbraith (Chair, Contact Group on Conservation Status Report) reported on the outcomes of the Contact Group. The Group had focused on reviewing and amending as appropriate the three annexes to document UNEP/CMS/ScC-SC5/doc.5/Rev.1. In general, the Contact Group had stressed the importance of considering species at the population level as well as species level, and noted that as populations became more fragmented, this issue might need more consideration by the Scientific Council. The Group also considered it important to use the most up-to-date lists of Range States for species, and to explain the strengths and limitations of all data sets used in analyses.
- 83. Annex 1 comprised a proposed framework for a report on the state of migratory species, using a State/Pressure/Response approach as the basis of the framework. The group had amended the framework by adding species and Protected Area datasets that could potentially supplement those originally proposed. In the 'Response' section, it had been suggested that an Annex of potential candidate species (e.g., migratory species that were not CMS-listed, but that could potentially qualify for listing) could be included, and that this could form part of the regular review of conservation status, and support a more strategic outlook of where the Convention could best focus its efforts. The revised Annex was provided in document UNEP/CMS/ScC-SC5/CRP5/A.
- 84. Annex 2 comprised a proposed template for case studies of Appendix I-listed species in-depth assessment, which was accepted by the group with minor revision. The revised Annex was provided in document UNEP/CMS/ScC-SC5/CRP5/B.
- 85. Annex 3 comprised a proposed draft methodology for a rapid assessment of CMS Appendix I taxa. The group, while approving the Annex without modification, had suggested that a wider range of threats needed to be considered by Parties than were included in the methodology, and that the quality and independence of the datasets should be made clear. It had also been suggested that hyperlinks should be provided to relevant CMS documents, and for criterion 4 on 'Management effort', it was noted that it would be useful to consider additional sources of management effort information (beyond data from CMS, CITES and IUCN) if datasets were readily available and suitable across taxonomic groups.
- 86. Mr. Giuseppe Notarbartolo di Sciara (COP-appointed Councillor for Aquatic Mammals) stressed the importance of including as many data sources as possible in the Framework in document UNEP/CMS/ScC-SC5/CRP5/A, and specifically mentioned Important Marine Mammal Areas.
- 87. Mr. Williams, on behalf of Mark Tasker (ACAP) asked whether the CMS daughter Agreements and their work were included in the approach, or if it only referred to the CMS Agreement itself. With regard to this point, he noted that most of the ACAP species were in any case listed on the CMS Appendices.

- 88. Ms. Kelly Malsch (UNEP-WCMC) replied that the daughter Agreements had not been considered in detail when writing the framework document. Wider CMS family listings would come into play as metadata that would feed into the framework. Item 4.b.ii. of the Framework document took account of the wider CMS family, and this issue would be open to discussion as the process developed.
- 89. Mr. Ian Redmond (CMS Ambassador) remarked that the emphasis of these documents was on threats and how to address them, with no mention of the benefits that could be derived from species and habitat protection. He suggested that examples of ecosystem services provided by species and habitats could be included in a box, and that text could be included stressing the scale of the benefits that arose from investing in species and habitat conservation.
- 90. Mr. Colin Galbraith (COP-appointed Councillor for Climate Change) felt that this was not the appropriate place to include this information, but he considered it to be very important. He offered to join Mr Redmond and the Secretariat in making efforts to include these points in discussions at COP14, and in statements to COPs of other Conventions, especially CBD and UNFCCC.
- 91. Ms. Amy Fraenkel (CMS Executive Secretary) suggested that information about the benefits arising from conserving migratory species could be included in the introduction of the document.
- 92. The Chair suggested that this information should also be included in communications and outreach materials.
- 93. The Committee approved documents UNEP/CMS/ScC-SC5/CRP5/A and UNEP/CMS/ScC-SC5/CRP5/B, as well as document UNEP/CMS/ScC-SC5/Rev.1/Annex3.
- 94. Mr. Barbieri introduced a discussion on the general role of the Scientific Council in keeping the status of species in the Appendices, and candidate species for listing, under review.
- 95. The Chair recalled that one of the new additions to the Programme of Work was an overarching reference to the Scientific Council's core tasks as outlined in the Convention text and Resolutions. Providing advice on listing proposals and keeping the status of migratory species under review were part of the core mandate of the Scientific Council for which the newly approved Conservation Status Report would provide a fundamental basis. It would also allow the Scientific Council to look strategically at species requiring greater attention, and to apply resources efficiently and effectively.
- 96. Ms. Fraenkel referred to developments since COP13 such as the Red Listing by IUCN of two species of African Elephant, and threats to bats arising from misinformation about the origins and spread of COVID-19. Some sort of notification mechanism would be helpful for the Scientific Council to bring issues to their attention for consideration at Sessional Committee meetings or between meetings. She asked the Sessional Committee to consider how it would be best to tap the expertise of the Scientific Council, and expressed hope that nimble mechanisms could be used to support the Scientific Council, its Sessional Committee and the Parties.
- 97. The Chair expressed support for the idea of a notification system, and suggested that an informal system might be more flexible and quick to use. She also suggested to have the review of the status of CMS-listed species as a standing item on the agenda of future ScC-SC meetings.
- 98. Mr. Williams cautioned that it was usually better to act in a considered manner, and not to react too quickly, noting that the response to the threat to bats had benefitted from a considered response.

ITEM 6. CONSERVATION ISSUES

Item 6.1 Avian Species

6.1.1 Action Plans for Birds

99. This item was dealt with in the Avian Species Working Group on 1 and 5 July and in plenary on 8 July.

Plenary of 8 July

- 100. Mr. Rob Clay (Chair, Avian Species Working Group) reported on the consideration of this item by the Working Group. Referring to document UNEP/CMS/ScC-SC5/Doc.6.1.1 Action Plan for the Yellow-breasted Bunting, he noted that an action plan had been under development for a few years, without having the possibility to finalize and adopt it. The main reason for the delay was that China, which was one of the most important Range States for this species was not a CMS party. The experience with four other action plan species, specifically the Spoon-billed Sandpiper, the Chinese Crested Tern, the Black-faced Spoonbill and the Far Eastern Curlew for which China was a very important Range State was highlighted. In all those cases China was very supportive of the Action Plans because they had been adopted through the East Asian- Australasian Flyway Partnership (EAAFP) to which China is a partner. The EAAFP however, covers only waterbirds. The fact that there is no equivalent agreement/partnership that covers passerines was discussed. The Avian Species Working Group was comfortable with the proposed way forward and timetable towards further development of the Action Plan for the Yellow-breasted Bunting provided in Doc.6.1.1, provided that all Range States are onboard.
- 101. The plenary took note of the report of the Avian Species Working Group, and confirmed support to the proposed way forward and timetable towards further development of the Action Plan for the Yellow-breasted Bunting provided in Doc.6.1.1.

Item 6.2 Aquatic Species

6.2.1 Chondrichthyan Species

102. This item was dealt with in the Aquatic Species Working Group on 1 and 5 July and in plenary on 8 July.

Plenary of 8 July

- 103. Mr. Barry Baker (Chair, Aquatic Species Working Group) reported on the consideration of this item by the Working Group. The Working Group G reviewed document 6.2.1 Synthesis of information on bycatch of Appendix I-listed chondrichthyan species provided by Parties in their National Reports to COP13, which was prepared by the Secretariat. It was agreed that the information provided by Parties in their National Reports to COP13 was not sufficient to provide the requested advice to Parties on measures to reduce bycatch to sustainable levels. Nevertheless, the Working Group felt that the Decision should be regarded as completed and that advice on bycatch mitigation measures would be dealt with under Decision 13.62. This decision requests the Scientific Council to prepare guidelines that include recommendations on the most effective and appropriate measures to mitigate and reduce bycatch of chondrichthyan species listed on the CMS appendices and Sharks MOU Annex 1. It was generally agreed that reporting on bycatch is a significant burden to Parties, and that similar requests came from a variety of organizations, including CITES and RFMOs. The Working Group welcomed the offer by the Sharks MOU AC Chair to assist with developing a method to improve the reporting process and noted that a revised Format for National Reports under CMS will be reviewed by the CMS Standing Committee in September 2021.
- 104. The plenary took note of the report of the Aquatic Species Working Group, and endorsed its considerations and recommendations.

Item 6.3 Terrestrial Species

6.3.1 Joint CITES - CMS African Carnivores Initiative

105. This item was dealt with in the Terrestrial Species Working Group on 1 and 5 July and in plenary on 8 and 9 July.

Plenaries of 8 and 9 July

- 106. Mr. Alfred Oteng Yeboah (Chair of the Terrestrial Species Working Group) reported that the Group considered the Council's mandate on CMS Decision 13.89 Conservation and Management of the African Lion (Panthera leo), and recommended to follow the recent recommendations from the 31st Meeting of the CITES Animals Committee that the revision of the Guidelines for the Conservation of Lions in Africa should be delegated to the Range States, in the context of Meetings of the Range States of the Joint CITES-CMS African Carnivores Initiative (ACI).
- 107. The Group also considered CMS Decision 13.97 Conservation and Management of the Leopard (Panthera pardus) in Africa. The Terrestrial Working Group had recommended to delegate the revision of the Roadmap for the Conservation of Leopards in Africa to Leopard Range States at Range State Meetings of the ACI.
- 108. For the two documents, in order to ensure a feedback loop from the ACI to the Scientific Council, the Terrestrial Species Working Group had agreed that the Secretariat should inform the Scientific Council regarding activities and outputs of the ACI Range State Meetings that related to the Committee's mandate, and request advice from the Scientific Council, as appropriate.
- 109. Discussion of conservation and management of the Cheetah in Africa had followed up Decision 13.94 by having proposed the establishment of an Intersessional Working Group on the conservation status of Cheetah populations of Botswana, Namibia and Zimbabwe. Draft Terms of Reference were submitted to Plenary for consideration in document UNEP/CMS/ScC-SC5/CRP6.3.1.2.
- 110. The plenary took note of the report of the Terrestrial Species Working Group, and endorsed its recommendations, including the establishment of an Intersessional Working Group on the conservation status of Cheetah populations of Botswana, Namibia and Zimbabwe, the mandate of which was included in document UNEP/CMS/ScC-SC5/CRP6.3.1.2.

6.3.2 Sahelo-Saharan Megafauna Initiative

111. This item was dealt with in the Terrestrial Species Working Group on 1 and 5 July and in plenary on 8 and 9 July.

Plenaries of 8 and 9 July

112. Mr. Alfred Oteng Yeboah (Chair of the Terrestrial Species Working Group) reported that the Group had considered Decision 13.101 Sahelo Saharan Megafauna as the basis for the Scientific Council to examine the possibility of an extension of the area of the Concerted Action 13.4 for Sahelo-Saharan Megafauna to the deserts of the Horn of Africa and associated biomes, and to make recommendations in that regard to COP14. The Working Group had recommended that the Secretariat would liaise with National Focal Points of the concerned Range States as to the options set out in document UNEP/CMS/ScC-SC5/Doc.6.3.2 and potential other scenarios regarding target species for the Concerted Action, with a view to examine the possibility of the extension at the 6th meeting of the Sessional Committee, based on the information and views received from the Horn of Africa Range States.

113. The plenary took note of the report of the Terrestrial Species Working Group, and endorsed its recommendations.

6.3.3 Conservation of the African Elephant

114. This item was dealt with in the Terrestrial Species Working Group on 1 and 5 July and in plenary on 8 and 9 July.

Plenaries of 8 and 9 July

- 115. Mr. Alfred Oteng Yeboah (Chair of the Terrestrial Species Working Group) reported that the Group had discussed possible implications related to the implementation of CMS Resolution 12.19 and the African Elephant MOU, following the IUCN's recognition of the Savanna Elephant *Loxodonta africana* and the Forest Elephant *L. cyclotis* as two distinct species and their revised Red List assessments of Endangered and Critically Endangered, respectively, as set out in document UNEP/CMS/ScC-SC5/Doc.6.3.3. Given the revised Red List assessment, the Group had recommended that the conservation needs and priorities for both forest and savanna African elephants should inform the conservation actions taken under the African Elephant Action Plan.
- 116. The plenary took note of the report of the Terrestrial Species Working Group, and endorsed its recommendations.

Item 6.4 Cross-cutting Conservation Issues

6.4.1 Wildlife Diseases and Migratory Species

117. This item was dealt with in plenary on 29 June and 9 July and discussed in the Cross-cutting Conservation Issues Working Group on 2 and 7 July.

Plenary of 29 June

- 118. Ms. Amy Fraenkel (CMS Executive Secretary), introduced this item, remarking that the COVID-19 pandemic had focussed world attention on this issue. Statistics showed that an increasing proportion of human diseases originated in wildlife. An important role of CMS was to bring the best scientific information in relation to Migratory Species to bear, and to counter and clarify disinformation on the topic, for example in relation to culling bats. There was a need to address the sources of risk, which were aligned with risks causing declines of migratory species, i.e., exploitation and use of species, habitat destruction, and encroachment of human activities. The Secretariat had been working with other partners and a good example of this was a UNEP initiative which had produced a strong report with CMS input. The proposed approach was to use existing mechanisms to address this issue, including the Working Group on wildlife disease and migratory species which was currently nascent.
- 119. Mr. Marco Barbieri (Secretariat) introduced document UNEP/CMS/ScC-SC5/Doc.6.4.1. Wildlife Diseases and Migratory Species. CMS had had longstanding involvement in the issue of wildlife disease since COP8 in 2005, and all Resolutions on the subject had been consolidated in Resolution 12.6. The Convention had established several initiatives to lead the implementation of mandates provided by the COP, and the document provided a brief overview of these. The currently dormant Working Group on Migratory Species as Vectors of Disease, established in 2007, if revitalized with a reconsidered remit, would provide a mechanism through which the Sessional Committee could contribute to the work on this issue. Clear Terms of Reference and a new membership would be needed. The dynamics of wildlife disease were complex and the remit of the Working Group would need to extend beyond vectors of disease. A fundraising effort had been successful and the generosity of the German government was allowing a review to be undertaken of available scientific knowledge of the links between animal migration and disease infection dynamics. Advice was being sought at the current meeting to define the scope and Terms of Reference of the review for contracting out after the meeting. It was anticipated that this issue would be discussed further in the Cross-cutting Conservation Issues Working Group.

- 120. The Chair noted that the issue was expected to be part of the remit of the new COP-appointed Councillor for Invasive Species, the recruitment of which was under way. Feedback from some Sessional Committee members who had been sent particulars and CVs of candidates was still awaited. The deadline for providing feedback was 2 July.
- 121. In the subsequent discussion, several members and observers expressed support to the reactivation of the Working Group on Migratory Species as Vectors of Disease, with a renewed mandate and a change in name reflecting it. In that regard, it was noticed that reference to wildlife disease could in some cases be misleading and that reference should rather be made to pathogens, a lot of which did not cause disease. Wildlife hosts were often not vectors of disease, but were rather a source of spill-over of pathogens. The inter-relation between the health of humans, livestock and wildlife was stressed. This required risk reduction using One Health approaches. This was particularly important as a range of human activities and drivers of population declines were often drivers of ill health in migratory species, which in turn could spill into humans and livestock. Attention was driven to a recently published report by JNCC and UNEP-WCMC titled *Zoonotic potential of international trade in CITES-listed species*. It was important to recognize the conservation impact of disease in migratory species, for example, the continuing high mortality of waterbirds caused by highly pathogenic avian influenza, and extreme mortality events of species such as Saiga antelopes *Saiga tatarica*.
- 122. The Chair looked forward to further discussion of this issue in the Cross-cutting Conservation Issues Working Group.

Plenary of 9 July

- 123. Mr. Colin Galbraith (chair, Cross-cutting Conservation Issues Working Group) reported that the group supported the reactivation and renewal of the existing Working Group on Wildlife Diseases, and proposed that it be renamed as the 'Working Group on Migratory Species and Health'. Updated Terms of Reference for the Working Group were compiled, and presented in document UNEP/CMS/ScC-SC5/CRP6.4.1/A.
- 124. The group encouraged engagement and coordination with other multilateral processes such as the development of the proposed World Health Organization Pandemics Agreement, and it was recommended to ensure linkages with other CMS working groups such as the Aquatic Wild Meat Working Group.
- 125. The group also refined the Terms of Reference for a review of migration and wildlife disease dynamics and the health of migratory species. The Terms of Reference for this review, which would be funded by the German Government, were available as document UNEP/CMS/ScC-SC5/CRP6.4.1/B.
- 126. Mr. Oliver Schall (Germany) suggested that carnivores should be included in the list of hosts of zoonotic pathogens in the second paragraph of the document. He also recommended referring to both hosts and intermediate hosts in the same sentence.
- 127. The Chair noted this change and said that the document would be subject to further potential changes following discussion between the Secretariat and the funders.
- 128. The chair concluded by confirming the Committee's approval of documents UNEP/CMS/ScC-SC5/CRP6.4.1/A and UNEP/CMS/ScC-SC5/CRP6.4.1/B.

² UNEP-WCMC & JNCC. 2021. Zoonotic potential of international trade in CITES listed species. JNCC Report No. 678, JNCC, Peterborough, ISSN 0963-8091.

6.4.2 Infrastructure Development and Migratory Species

129. This item was dealt with in plenary on 29 June and 9 July and discussed in the Cross-cutting Conservation Issues Working Group on 2 and 7 July.

Plenary of 29 June

- 130. Ms. Clara Nobbe (Secretariat) introduced document UNEP/CMS/ScC-SC5/Doc.6.4.2, Infrastructure Development and Migratory Species. The document reported on the implementation of Decisions 13.130 to 13.134, which recommended the establishment of a multi-stakeholder intersessional Working Group on linear infrastructure. Tasks of the Working Group included a review of available information, identification of areas where assistance was needed to enhance the implementation of Resolution 7.2 (Rev. COP12), development of a work plan, and provision of recommendations on the future direction of work. The Secretariat had commissioned a report, the summary of which was annexed to document UNEP/CMS/ScC-SC5/Doc.6.4.2, while the full report was provided in document UNEP/CMS/ScC-SC5/Inf.3. Funding from the German Federal Agency for Nature Conservation would allow a meeting of the Working Group in 2022 in Germany. The Sessional Committee was recommended to establish a multi-stakeholder Working Group on linear infrastructure, nominate the Chair, and assist the Secretariat with identifying members of the Working Group.
- 131. Mr. James Williams (ScC-SC alternate member for the European Region) noted that the document included an analysis of reports from Parties, and cautioned that the reports had been prepared before the Decisions were adopted, and that information in these reports was often superficial and might not be useful. He expressed concern about any proposal that burdened Parties with the need to add more detail to their reports.
- 132. The Chair considered the scope of the Working Group to be crucial, and hoped to see it working in tandem with the Energy Task Force, which considered similar issues regarding the impacts of infrastructure. She said that the Cross-cutting Conservation Issues Working Group would take this item forward.

Plenary of 9 July

- 133. Mr. Colin Galbraith (chair, Cross-cutting Conservation Issues Working Group) reported that the group had taken note of the recently completed analysis on the impacts of infrastructure on migratory species that recommended the establishment of an Infrastructure Working Group. It was agreed that the focus on the terrestrial environment provided a good starting point, but the group recommended that the new Working Group should consider as many ecosystems as possible, including in coastal and marine environments. It was recommended that the new Working Group should consider a consolidation of the existing guidelines and best practice in this field.
- 134. The group discussed and refined the proposed membership of the new Working Group, specifically including Scientific Council members as key members. Terms of Reference for the new Intersessional, Multi-stakeholder Working Group on Linear Infrastructure were compiled as document UNEP/CMS/ScC-SC5/CRP6.4.2., and the Secretariat was requested to further refine these Terms of Reference and identify a Chair for the Working Group.
- 135. The chair concluded by confirming the Committee's approval of document UNEP/CMS/ScC-SC5/CRP6.4.2.

6.4.3 Light Pollution

136. This item was dealt with in plenary on 29 June and 9 July and discussed in the Cross-cutting Conservation Issues Working Group on 2 and 7 July.

Plenary of 29 June

- 137. Mr. Marco Barbieri (Secretariat) introduced document UNEP/CMS/ScC-SC5/Doc.6.4.3 *Light Pollution and Migratory Species*. This was an issue that had only recently come to the attention of CMS, with a COP13 Resolution based on proposals from Australia and the EU. Decisions 13.138 and 13.139 had mandated the Scientific Council to undertake further work, especially on taxa not covered in Resolution 13.5, and required the Secretariat to dedicate a World Migratory Bird Day (WMBD) to the issue of light pollution. Some progress had been made, with support from the COP-appointed Councillor for Marine Pollution, Mr. Mark Simmonds. The Secretariat and the COP-appointed Councillor had contracted a review from a consultant which was available as document UNEP/CMS/ScC-SC5/Inf.7. This provided a basis for identifying gaps in the kinds of guidelines that were required, and recommendations on further steps. Resources were available and work could continue after the meeting.
- 138. The Chair drew attention to appendices for the light pollution guidelines being prepared by Australia, covering bats and terrestrial mammals, and asked for clarification about the kind of input required from the Sessional Committee for a future WMBD.
- 139. The Secretariat noted that COP13 had recommended discussion by the Sessional Committee on how light pollution might best be addressed through a WMBD campaign. WMBD was a communications and campaigning exercise based on technical considerations, and it was hoped the Sessional Committee could provide advice about the technical aspects of the campaign.
- 140. Mr. Mark Simmonds (COP-appointed Councillor for Marine Pollution) provided background information for document UNEP/CMS/ScC-SC5/Inf.7. All organisms had evolved under consistent cycles of day and night, lunar and seasonal light conditions. Natural light was used by wildlife and humans in regulating metabolism, growth and behaviour, and was the basis of internal circadian clocks. Perturbation of these internal clocks was a cause of hormonal imbalances and disruption of a myriad of downstream biochemical, physiological and behavioural processes. Twenty-three per cent of the world's land surface between 75°N and 60°S had light-polluted skies. Between 2012 and 2016, there had been a total radiance growth of 1.8 per cent per year, with the brightness of continuously lit areas increasing by 2.2 per cent per year. Half of the USA and 88 per cent of Europe had light polluted skies.
- 141. Ms. Laetitia Nunny (Consultant, author of document UNEP/CMS/ScC-SC5/Inf.7 *Impact of Light Pollution on different taxa of Migratory Species*) provided a summary of the report. The scientific literature showed that impacts of light pollution varied between taxa and some taxa such as fish had been little studied in this regard. The report included summary tables detailing reported impacts, and recommended areas for future research and mitigation. The report reviewed existing guidelines such as those produced by Eurobats and Australia, and provided information on mitigation methods for different taxa. Finally, knowledge gaps were highlighted and suggestions made for further steps.
- 142. Mr. Simmonds stressed the widespread effects of light pollution across all taxa, and drew attention to the strong recommendation to generally reduce artificial light at night, especially affecting bats and birds. CMS could provide guidelines on how this could generally be done. He suggested that a next step could be to bring together light pollution experts to consider guidelines.
- 143. Mr. Graeme Taylor (ScC-SC member for the Oceania Region) drew attention to the massive scale of light pollution produced on squid jigging fishing boats, as revealed by satellite images. Huge numbers of seabirds including gadfly petrels, storm petrels, and shearwaters were attracted to the light and there were records of over 1000 seabirds dying from this cause on one ship in a single night. There had been a strong focus on fisheries bycatch in recent years, but light pollution at sea was a major knowledge gap that needed urgently to be addressed.

- 144. Some participants noted that light pollution was an excellent theme for the WMBD campaign, with great potential for communications and outreach. Examples of existing initiatives that could contribute to it were offered. In Italy, efforts were made to reduce light pollution on one night per year to publicize the issue. In Canberra, there was a campaign 'Lights off for the Bogong moths' to help the declining, migratory Bogong moth *Agrotis infusa*, a key food source for the Critically Endangered Pygmy Possum *Burramys parvus*. Short animations were being produced in Australia that might be a suitable resource for a WMBD campaign on light pollution.
- 145. Mr. Ian Redmond (CMS Ambassador) said that light pollution was an example of humans not thinking about the unintended consequences of technical progress. He pointed out that light emitted at wavelengths not visible to humans was a potential problem, and drew attention to 4G and 5G telecommunications masts that were a source of electromagnetic and microwave radiation known to affect migratory species.
- 146. The Chair looked forward to further discussions in the Cross-cutting Conservation Issues Working Group.

Plenary of 9 July

- 147. Mr. Colin Galbraith (chair, Cross-cutting Conservation Issues Working Group) referred to document UNEP/CMS/ScC-SC5/Doc.6.4.3. He noted that Work on light pollution was being done in three phases: 1. The production of a short document on the impact of light pollution on different taxa of migratory species of relevance to CMS, 2. The production of a review document, identifying possible gaps in the availability of appropriate guidelines, and 3. The production of a set of guidelines on light pollution. Phases one and two were complete. Phase three was to focus on the drafting of guidelines to complement those already agreed.
- 148. It was proposed that three sets of guidelines be produced: 1. Concerning migratory birds, 2. Concerning bats, and 3. Providing generic advice on reduction of light pollution. One or two consultants should be appointed using the funding available from the German government, and they would facilitate the further collection of expert advice, the drafting of the guidelines, and their expert review prior to submission to the next meeting of the Sessional Committee. The guidelines would be designed to be user-focused and focused on the migration process itself. The group noted that, to avoid duplication, existing work and guidelines on this topic should be fully incorporated into the new guidelines.
- 149. The chair concluded by confirming the Committee's approval of the recommendations of the Working Group.

6.4.4 Impact of Plastic Pollution on Aquatic, Terrestrial and Avian Species

- 150. This item was dealt with in plenary on 29 June.
- 151. Ms. Clara Nobbe (Secretariat) introduced document UNEP/CMS/ScC-SC5/Doc.6.4.4, *Impact of Plastic Pollution on Aquatic, Terrestrial and Avian Species*, saying it related to Decision 13.123 requiring the Secretariat to develop a report on the state of knowledge for submission to COP14, along with a summary of existing guidance. The Scientific Council was expected to recommend next steps for addressing the threat of plastic pollution based on the report, and to collaborate with other scientific mechanisms such as those under the International Whaling Commission, UNEP and other MEAs, to exchange available scientific and other relevant data and information related to the prevention and reduction of the impact of plastics on migratory species.

152. The Secretariat had worked with the UNEP Regional Office for Asia and the Pacific (ROAP) to implement a project funded by the Government of Japan, which contributed to the implementation of the Decision in the Asia and Pacific region. The project, "Promotion of Action against Marine Plastic Litter in Asia and the Pacific (CounterMEASURE II)" was a U.S.\$5.7-million project aiming at generating, sharing and disseminating scientific knowledge on plastic pollution in the Mekong, Ganges and selected rivers in Sri Lanka and Myanmar to inform policy and decision-making processes at local, national, regional and global level. The Secretariat was leading the Migratory Species Focal Area of CounterMEASURE II, to be implemented by March 2022 with a budget of U.S.\$ 271,000. The Secretariat was working on this with a number of implementing partners including the National Oceanography Centre (United Kingdom), the Commonwealth Scientific and Industrial Research Organization (Australia), and the Mekong River Commission Secretariat (based in the Lao People's Democratic Republic). The first report prepared by the National Oceanography Centre was currently undergoing review by the project's Scientific Advisory Group. All relevant outputs of this project would be shared with the Sessional Committee before its 6th meeting.

6.4.5 Climate Change and Migratory Species

153. This item was dealt with in plenary on 29 June and 9 July and discussed in the Cross-cutting Conservation Issues Working Group on 2 and 7 July.

Plenary of 29 June

- 154. Mr. Colin Galbraith (COP-appointed Councillor for Climate Change) introduced document UNEP/CMS/ScC-SC5/Doc.6.4.5, Discussion Paper for the Scientific Council on Decision 13.128 Climate Change and Migratory Species. The document provided a start to the implementation of CMS COP13 Decision 13.128, which sought interpretation of paragraph 9 of Resolution 12.21.
- 155. It was envisaged that the ongoing intersessional Working Group on Climate Change would follow up on any discussion and actions that might arise from the current meeting. Migratory species changed where and when they migrated in response to environmental drivers, including changes in climate. The Annex to this document, drafted by the UK Natural Environment Research Council, working with the UK Joint Nature Conservation Committee, reviewed evidence of the ways in which climate change might affect migratory species in terrestrial, freshwater and marine habitats. Terrestrial and freshwater species faced a wide variety of pressures linked to a changing climate. The three case studies examined desertification, arctic vegetation shifts and sea level rise had been chosen to illustrate the diversity of threats posed to ecosystems and to the migratory species which relied on them. Three further case studies relating to marine species had been examined: ocean warming, Arctic sea ice loss and ocean acidification. As for terrestrial and freshwater habitats, these examples were not intended to be exhaustive, but were nonetheless useful in exploring a range of conservation scenarios and the framework for action which followed.
- 156. Mr. James Williams (ScC-SC alternate member for the European Region) continued the introduction by saying that following the case studies noted above, the Annex considered scenarios and potential actions that Parties could undertake, supported by a decision tree which provided a framework for action. The decision framework was intended as a basis to guide the engagement between Range States, and for the prioritization of actions for migratory species at risk from climate change. By combining this framework with careful analysis of scientific evidence for each species, strategies could be focused on actions which made the best use of resources to protect species and their migration routes. Four potential strategies were considered: conservation, restoration, adaptation, and translocation. It was expected that the detail of the paper would be examined in the Cross-cutting Conservation Issues Working Group. In terms of further steps, it was suggested that the ongoing Intersessional Working Group on Climate Change should be convened to further develop a document to be considered at the 6th meeting of the Sessional Committee, and by COP14.

- 157. Mr. Graeme Taylor (ScC-SC member for the Oceania Region) informed the Committee that New Zealand was developing two documents on climate change in terms of risk assessment to seabirds and marine mammals. The reports would become available on the New Zealand Department of Conservation website, with a link to the CMS Secretariat's website. The reports would be useful for other countries working on taxonomic groups sensitive to climate change.
- 158. Mr. Ian Redmond (CMS Ambassador) focussed on Recommendation vi of document UNEP/CMS/ScC-SC5/Doc.6.4.5, saying that the Recommendation should look beyond the ecosystem services provided by areas conserved for migratory species, and also look at the role played by migratory species in nature-based solutions to prevent climate change. He had been working with Mr. Ralph Chami at the International Monetary Fund (IMF), who had calculated the lifetime value in terms of carbon sequestration of Great Whales as U.S.\$ 2 million per whale. He considered this transformative, and gave the example of ship strikes, where, if realistic consequences were applied, ship owners would ensure that more care was taken which was now possible with new technology. Another example was the calculation that the carbon sequestration of an African Elephant over a 60-year lifespan had a value of U.S.\$ 1.6 million. He urged CMS to investigate the ecosystem services provided by individual animals among migratory species as a basis for their conservation. CMS could play a leading role by promoting migratory species as potential saviours of mankind under Recommendation vi.
- 159. Mr. Galbraith suggested that it would be a good idea to take some examples, such as those given by Mr. Redmond, to the United Nations Framework Convention on Climate Change (UNFCCC) COP26 in Glasgow in November 2021.

Plenary of 9 July

- 160. Mr. Galbraith (chair, Cross-cutting Conservation Issues Working Group) reported that the group had considered the framework proposed in document UNEP/CMS/ScC-SC5/Doc.6.4.5. The framework included a decision tree to help identify possible conservation actions based on climate models and the natural history, ecology, and conservation status of species.
- 161. The group supported the approach. It was suggested that Parties be consulted and encouraged to test the decision tree and provide feedback on: 1. The interpretation of the terms 'barrier' and 'restoration', 2. Indicators to measure overall change, and 3. How to evaluate vulnerability to climate change for selected species.
- 162. Further work was proposed to develop approaches for the inclusion of extreme climate related events, such as wildfires, in conservation planning.
- 163. The document was noted, the work to date welcomed, and the Climate Change Working Group referred to for further intersessional deliberation. It was hoped that this group would hold an intersessional meeting in 2022.
- 164. The Chair thanked Mr. Galbraith for the Report on the discussions of Cross-cutting Conservation Issues Working Group, and opened the floor for discussion.
- 165. Ms. Margi Prideaux (Chair of the Aquatic Wild Meat Working Group) strongly supported references to the escalating impacts of climate change, and referred to the UN Office for Disaster Risk Reduction report published in October 2020 that had quantified the increase in natural disasters in the period 2000 2019 compared with the previous 20 years, and related the increase to a rise in climate-related disasters including extreme weather events. She felt that CMS had a strong role to play in helping reduce the frequency and impacts of these disasters.

- 166. Ms. Amy Fraenkel (CMS Executive Secretary) said that climate change was the current preoccupation of many high-level government representatives. Climate change was having strong impacts on the species and habitats that were the interest of CMS, and the concern of governments would help advance action on this issue. It was also a powerful issue to include in communications efforts, and it was essential to continue raising the profile of climate change and migratory species.
- 167. The Chair stressed the importance of the need to use communications tools to raise the profile of the issue of Climate Change and migratory species.
- 168. Mr. Galbraith pointed out that UNFCCC COP26 in Scotland in October November 2021 would provide an opportunity to publicize some of these connections between migratory species and climate change.
- 169. The chair concluded by confirming the Committee's approval of the recommendations of the Working Group.

ITEM 7. INTERPRETATION OF THE TERMS 'RANGE STATE' AND 'VAGRANT'

- 170. This item was dealt with in plenary on 29 June and 9 July and discussed in the Cross-cutting Conservation Issues Working Group on 2 and 7 July.
- 171. Mr. James Williams (ScC-SC alternate member for the European Region) introduced document UNEP/CMS/ScC-SC5/Doc.7, Discussion Paper for the Scientific Council on Decision 13.140 Definition of the Terms 'Range State' and 'Vagrant' which marked the beginning of the implementation of Decision 13.140. The document, and an associated Information Document (UNEP/CMS/ScC-SC5/Inf. 6 Decision 13.140 Definition of the Terms "Range State" and "Vagrant") had been prepared by the UK Joint Nature Conservation Committee. There would likely be case-by-case considerations for particular species in particular countries, and it would be difficult to give numerical definitions for when a vagrant became established and Range State status was achieved, or, conversely, when a species decline led to Range State status being lost. The documents listed a number of factors which might help Parties in their considerations. A decision tree was suggested to help ask pertinent questions that might assist a Party in considering the circumstances it faced. It was expected that the detail of the paper would be examined in the Cross-cutting Conservation Issues Working Group.
- 172. In response to a comment about the importance of anticipating species distributions in the light of climate change, Colin Galbraith (COP-appointed Councillor for Climate Change) noted that ways had to be found to persuade governments to take action for species that were likely to appear or disappear in future, and to allocate resources for this. CMS was in a unique position to address this issue, and forward-thinking, large-scale discussion was needed.
- 173. It was also noted that species ranges were likely to shift in unexpected ways, not only due to long-term changes, but also because of the increase in large-scale natural disasters and sudden, large-scale habitat loss.
- 174. Mr. Fernando Spina (COP-appointed Councillor for Connectivity) drew attention to a module in the forthcoming African-European Bird Migration Atlas devoted to changes in migratory strategies and patterns in relation to climate change, using historic data from a whole century
- 175. Mr. Jean Philippe Siblet (ScC-SC alternate member for the European Region) pointed out that in forests, there was great variability between species in their ability to adapt to climate change. This probably affected non-migratory species more than migratory species, which were more able to shift their ranges of distribution. Connectivity of protected areas was an important consideration in this regard. The Chair concurred that connectivity between protected areas was a major issue that would be reflected in the post 2020 Global Biodiversity Framework.

- 176. Ms. Amy Fraenkel (CMS Executive Secretary) raised the topic of dynamic management techniques, which related to the impacts of climate change on land and protected area management, and also linked with connectivity.
- 177. Mr. Mark Simmonds (COP-appointed Councillor for Marine Pollution) described how Grey Whales *Eschrichtius robustus* had formerly been resident in the Atlantic Ocean, but went extinct for reasons unknown hundreds of years ago and were nowadays confined to the Pacific and Arctic Oceans. Individuals had recently been sighted in the Atlantic and even in the Mediterranean. It was difficult to determine whether these animals were vagrants, and what response, if any, was appropriate. Other whale species were also shifting their ranges in response to climate change, and these changes would have to be built into population models.
- 178. Mr. Djibril Diouck (ScC-SC member for the Africa Region) shared some of his experiences with site management in relation to climate change in Senegal. Climate change was affecting marine turtles and manatees, and was an indirect cause of increases in fisheries bycatch. There was also increasing competition for groundwater. The number of protected areas in Senegal had increased by 14 in the past 10 years, and there was a need for corridors to connect these and other protected areas. More protected areas were needed, as well as research and awareness raising.
- 179. The Chair concluded the discussion by reiterating the links between climate change and the Range States used by species. She looked forward to a continuation of the discussion in the Cross-cutting Conservation Issues Working Group.

Plenary of 9 July

- 180. Mr. Galbraith (chair, Cross-cutting Conservation Issues Working Group) reported that the group had considered the framework proposed in document UNEP/CMS/ScC-SC5/Doc.7.
- 181. It was agreed that further clarity and clear guidelines would help ensure consistency of interpretation. The framework was noted, and it was concluded that the existing terminology in the text of the Convention was key, and that significant further work and discussion were needed on this topic.
- 182. It was suggested either that a dedicated Intersessional Working Group could be convened to further this initiative, or that the work could continue within the Working Group on climate change. Draft Terms of Reference for the group had been prepared, contained in document UNEP/CMS/ScC-SC5/CRP7.
- 183. Mr. Daniel Fernando (ScC-SC member for the Asia Region), Mr. Jürgen Friedrich (Germany), and Ms. Susan Lieberman (WCS) suggested deleting paragraph 3 of the document because the timing appeared not to follow logically from paragraph 2, and the activity seemed to be redundant in relation to paragraph 1. Paragraph 3 also gave responsibility to the Intersessional Working Group when it would be more appropriate if the Scientific Council were responsible.
- 184. The chair concluded by confirming that the Committee agreed to the establishment of an Intersessional Working Group on this issue, and approved the Terms of Reference for this group contained in document UNEP/CMS/ScC-SC5/CRP7, subject to the amendment noted in the discussion.

ITEM 8. CMS APPENDICES

8.1 Improving the listing proposal process and outcomes

185. The item was discussed in plenary on 30 June 2021. Vice Chair Daniel Fernando chaired the discussion on this agenda item.

- 186. Narelle Montgomery (SC-SC member for the Oceania Region) introduced document UNEP/CMS/ScC-SC5/Doc.8.1/Rev.1 Improving the Listing Proposal Process and Outcomes on behalf of two CMS regions: Oceania, and South and Central America and the Caribbean, and noted that this was the first time a proposal had been submitted jointly by more than one region. Working with other countries to effectively manage and conserve migratory species was a founding principle of CMS, and the main tool available to do this was the inclusion of eligible species in its Appendices. The requirements for including species in the Appendices had most recently been agreed in Resolution 13.7, but in their view, the provisions concerning consultation with relevant Range States prior to submitting a listing proposal had not always been fulfilled. In an effort to improve consultation, a new document management process had been implemented in the lead-up to COP13, and while a number of listing proposals at COP13 had been significantly strengthened by this process, in their view, there had been cases where consultation was considered to have been inadequate, and the advice of the Scientific Council was not thought to have been fully observed. She noted that this could compromise the credibility of the Convention and to the active participation of Parties in implementing the necessary conservation measures.
- 187. Document UNEP/CMS/ScC-SC5/Doc.8.1/Rev.1 recommended that a joint Working Group should be established with the Sessional Committee and the Standing Committee, to investigate activities that could further encourage and enhance effective consultation with all Range States prior to the submission of listing proposals. Paragraph 21 proposed a number of options for the consideration of the joint Working Group. Consultation was an important issue that deserved innovative thinking to ensure the credibility of the Convention.
- 188. The Vice Chair stressed that no decisions on these proposals would be made in the current meeting, and invited the views of participants on the establishment of an intersessional joint Working Group.
- 189. There was considerable discussion regarding this agenda item. There was broad agreement that consultation with all relevant range states prior to submission of listing proposals was beneficial. However, there were differing views as to the extent to which this was already taking place or could be improved. Referring to some of the proposed options to enhance consultation included in Doc.8.1, some interventions cautioned against the risk of making the listing process too cumbersome to handle, particularly for Parties with limited capacity and in the case of of listing of species with broad ranges. Other issues that were mentioned included potential difficulties in undertaking consultations with Range States that were not Parties to the convention, and on who had the authority to judge whether the consultation of a listing proposal had been adequate or not. It was also found that some of the proposed options concerning limitations of the listing in relation to consultation could go against the interest of species conservation. Reference was also made to the existing process of issuing reservation on amendments to the appendices, noting that some of the proposed options may not be appropriate in light of it.
- 190. In relation to the proposal of establishing a joint Working Group with the Sessional Committee and the Standing Committee, several participants noted that the process of listing species on the Appendices had scientific, policy and political perspectives, and expressed support to the proposal. Other participants considered that the design of the listing process was essentially a matter of governance and law, and questioned whether the Scientific Council had a mandate or a legal basis to take initiative in this regard. It was also noted that the Conference of the Parties had recently revised the listing process through Res.13.7, and that it seemed premature to reopen the issue already without allowing enough time to test the effectiveness of the process.

- 191. Ms. Amy Fraenkel (CMS Executive Secretary) responded to questions raised with respect to the mandate of the Sessional Committee to set up such a Working Group. She noted that the Standing Committee, which would be meeting in September, had a clearer mandate, and that the Secretariat would further consider whether the Sessional Committee could make a recommendation to the Standing Committee on this topic. Decisions on listings were obviously the responsibility of the COP and the mandate of the Scientific Council was to provide scientific advice on the listing proposals. Parties could make reservations on individual amendments, as stipulated in Article XI of the Convention. In addition, the COP could reduce the scope of a proposal. Good science and good consultation were essential, and clearly a shared view, but the agenda item proposed a consideration of whether there were options for improving consultation processes.
- 192. The Vice Chair saw two possible ways forward, either for this issue to be addressed by the Standing Committee, or alternatively, to set up an in-session Contact Group for further discussion.
- 193. Ms. Montgomery expressed gratitude for the comprehensive discussion. The purpose of the document was to enhance consultation and ensure that the best science was available for listing proposals. A joint Working Group had been proposed, recognizing that the Standing Committee would have the final say at its September meeting. The references to reservations had been topical, and paragraph 21 of the document had provoked discussion and thought. If a Contact Group was established, the options in paragraph 21 could be amended, included or rejected. She hoped the discussion would continue in a Contact Group.
- 194. A number of other interventions raised questions on the mandate of the Sessional Committee to establish a Working Group or to make recommendations to the Standing Committee on this subject. Following further discussion, it was clear that there was not unanimous support for establishing a Contact Group during this meeting.
- 195. As the Vice Chair saw no clear consensus, the item was declared closed. A revised paper, clarifying the issue, would be submitted to Standing Committee for its consideration at its next meeting.

8.2 Disaggregation of higher taxa listed on Appendix II

196. This item was dealt with in plenary on 30 June and 8 July and discussed in a dedicated contact group on 6 July.

Plenary of 30 June

- 197. Mr. Stephen Garnett (Joint COP-appointed Councillor for Birds) introduced document UNEP/CMS/ScC-SC5/Doc.8.2, *Disaggregation of Higher Taxa listed on Appendix II*. He noted that Appendix II of CMS lists 63 bird families and three genera rather than individual species, as well as two families of mammals and two of reptiles. Aggregating species by taxa higher than the species level could make it difficult to develop appropriate conservation management for the species involved, or to assess progress in its implementation. The issue had been discussed in document UNEP/CMS/COP13/Doc.27.3 presented to COP13. COP13 had accepted the offer of the Scientific Council to work on the best approach to this issue and present advice to COP14.
- 198. Some options for how to deal with this issue were presented in document UNEP/CMS/ScC-SC3/Doc.8.2. This list of alternative approaches was not exhaustive and it might be appropriate to consider others. There was an opportunity to discuss these alternatives in a Contact Group the following week, when a way forward could be decided.
- 199. The Chair established a Contact Group to take discussions forward.

Plenary of 8 July

- 200. Mr. Stephen Garnett (Chair, Contact Group on Disaggregation of Higher Taxa listed on Appendix II) reported that the group had considered whether higher taxa of bats and turtles should be considered in the disaggregation exercise, and concluded that the mandate from COP13 only included birds.
- 201. Discussion of which avian species to include in the process had been inconclusive, with some favouring inclusion on Appendix II of only those species with an unfavourable conservation status that met the criteria for cyclical and predictable migration, while others preferred a longer list, potentially including some species with an IUCN Red List status of Least Concern that had declining populations.
- 202. The Contact Group recommended the establishment of an Intersessional Working Group on disaggregation of higher avian taxa listed on Appendix II. Draft Terms of Reference for this group had been developed and were available as document UNEP/CMS/ScC-SC5/CRP 8.2. Details were included in the Working Group report available on the meeting website.
- 203. The Committee was requested to approve the establishment of the Intersessional Working Group and the draft Terms of Reference of the Group.
- 204. After reviewing the draft Terms of Reference, and amending the wording to clarify that the process only included avian species, the Committee approved the establishment of the Intersessional Working Group and document UNEP/CMS/ScC-SC5/CRP8.2, the draft Terms of Reference for the Group.

ITEM 9. IMPLEMENTATION OF THE CONCERTED ACTIONS PROCESS

205. This item was dealt with in plenary on 28 June and 8 July.

Plenary of 28 June

- 206. Mr. Marco Barbieri (Secretariat) introduced document UNEP/CMS/ScC-SC5/Doc.9 *Implementation of the Concerted Actions Process*, explaining that it concerned a suggestion from the Secretariat that a revision of Resolution 12.28 on Concerted Actions had become necessary. The Concerted Action process had undergone considerable revision since COP10, and Resolution 12.28 had consolidated all previous Resolutions on this issue. In the implementation of the revised process, practical challenges had however led to a divergence of actual practice from the letter of the Resolution, particularly in relation to the role of the Scientific Council in the process. The language of Resolution 12.28 also reflected in some parts previous practice, and adjustment appeared to be necessary. The Annex to document UNEP/CMS/ScC-SC5/Doc.9 included an analysis of Res. 12.28 (Rev.COP13) and proposed initial elements for a revision of the resolution. The Sessional Committee was invited to develop a proposal for the revision of Resolution 12.28 based on this. It was proposed to establish an online forum where written input to the draft proposal annexed to UNEP/CMS/ScC-SC5/Doc.9 could be provided by Sessional Committee members. The Secretariat could then consolidate the inputs and submit a revised document to the final plenary.
- 207. Mr. James Williams (ScC-SC alternate member for the European Region) said that it was helpful to see document UNEP/CMS/ScC-SC5/Inf.2, the report on the implementation of the Concerted Action for the Antipodean Albatross *Diomedea antipodensis*, and it was clear that reports from all Concerted Actions would be needed for the next Sessional Committee meeting to be able to report to COP14. He considered it important that the Sessional Committee should review reports on Concerted Actions to advise Parties on new and existing Concerted Actions. He also considered it essential to consider the reports before each COP.

- 208. Mr. Graeme Taylor (ScC-SC member for the Oceania Region) read a statement to the meeting with specific comments on the proposed amendments to Resolution 12.28 and associated Guidelines. He then provided an update on the implementation of the Antipodean Albatross Concerted Action submitted by Australia and New Zealand.
- 209. The Chair observed that although the report on implementation of the Concerted Action on Antipodean Albatross had been submitted, there was nowhere in the Agenda for it to be considered. She agreed that it would be important to consider such reports prior to each COP.
- 210. The Chair said it was clear that Resolution 12.28 required revision to reflect current practice. She proposed that participants should send written comments on the Annex of document UNEP/CMS/ScC-SC5/Doc.9. The Secretariat had already proposed amendments and it would be helpful if comments could be received within 24 hours. Areas still in need of discussion would then be clear. She clarified that this was a first step to see if there were consistent areas of concern that required further discussion.

Plenary of 8 July

- 211. In the final plenary session, Mr. Barbieri introduced a revised version of document UNEP/CMS/ScC-SC5/Doc.9/Annex as document UNEP/CMS/ScC-SC5/CRP9 *Draft Revised Resolution 12.8 Concerted Actions*. As agreed on the first day of the meeting, Committee members had provided comments in writing by email and the Secretariat had compiled the revised version, which had not been discussed by a Working Group. The amendments resulted in a Resolution text that was aligned with current practice.
- 212. The Chair noted that only a small group of the Committee had worked on the revision, and proposed to present it to the Committee in detail, with Committee members invited to comment only on substantive issues.
- 213. Mr. Williams considered the Resolution to have been substantially improved, and suggested that since it concerned the overall process of the Convention, it would be appropriate for it to be reviewed by the Standing Committee at its September meeting. After discussion, the meeting decided to send the revised Resolution to the Standing Committee for review.
- 214. Mr. Barbieri presented the revised document to the Committee paragraph-by-paragraph. No substantive edits were required, and the editing was considered complete apart from minor amendments to the language.
- 215. The chair concluded the item by confirming that the Committee approved document UNEP/CMS/ScC-SC5/CRP9. She said that the changes brought consistency to the Resolution and ensured alignment with current practice.

IV. FORMAL AND CONCLUDING BUSINESS

ITEM 10. TIME AND VENUE OF THE SIXTH MEETING OF THE SESSIONAL COMMITTEE OF THE SCIENTIFIC COUNCIL (ScC-SC6)

- 216. Mr. Marco Barbieri (Secretariat) said that the ScC-SC6 meeting would be convened within 120 days of COP14, the date of which had not yet been decided. Additional, smaller, more focussed, online meetings might also be considered.
- 217. The Chair noted that the current meeting had referred a number of documents to the next meeting. If the sixth meeting of the Scientific Council Sessional Committee could be supplemented by a smaller, more focussed meeting (or meetings), these documents could still be considered and momentum would not be lost.

218. Ms. Amy Fraenkel (CMS Executive Secretary) said that the reduced costs of online meetings were advantageous, but she was mindful of the heavy volume of work that would need to be considered at the Sixth Meeting of the Scientific Council Sessional Committee.

ITEM 11. ANY OTHER BUSINESS

- 219. Mr. Stephen Garnett (Joint COP-appointed Councillor for Birds) provided an update on a project coordinated by the International Union of Biological Sciences (IUBS) titled *Governance of Global Taxonomic Lists* that was working towards a standardized, global system of taxonomy. This system might resolve current issues such as the differences in approach to taxonomy employed by CITES and CMS. Taxonomists in many fields were discussing the best ways to recognize which lists had appropriate governance procedures in place to accept names and bring them into global use, with the eventual aim of producing a single global list of all life forms. To date, six academic papers were in press and one had been published.
- 220. Mr. Garnett also proposed that an online prospectus summarizing the scientific work of the Scientific Council and the Convention as a whole would be a good way of publicizing this work and encouraging other academic researchers to cooperate with Scientific Council members. He suggested that it would keep costs down if interested Ph.D. students and interns were involved in helping with this. Such a prospectus might also be a useful tool for raising funds.
- 221. Ms. Amy Fraenkel (CMS Executive Secretary) welcomed the idea of an online research prospectus. This would provide opportunities for scientists working in relevant fields to showcase their work and contribute to international species conservation.
- 222. Mr. Garnett offered to work together with the Secretariat towards establishing an online prospectus of the scientific work of CMS.
- 223. Mr. Ian Redmond (CMS Ambassador) drew attention to threats to the Kasanka National Park in Zambia, which was the migratory destination of 10 million Straw-coloured Fruit Bats *Eidolon helvum* in the largest migration of mammals on earth. The National Park was suffering illegal deforestation and other threats which threatened the bat roost. Zambia was not a Party to the Convention and Mr Redmond suggested that the Secretariat could send a message to the government of Zambia about the importance of this migration system, and possibly involve source countries of the migration in Central Africa that were Parties to the Convention.
- 224. Mr. Djibril Diouck (ScC-Sc member for the Africa Region) reported that a multi-stakeholder partnership was coordinating a regional network of trained observers that was collecting data on marine turtles for the West Africa Bycatch Project. Priority measures to improve the situation, especially in small fisheries organizations, were being defined, and a draft report would be submitted to the CMS Scientific Council in due course.

ITEM 12. CLOSURE OF THE MEETING

- 225. Ms. Amy Fraenkel (CMS Executive Secretary) made a closing statement in which she thanked the Chair, Ms. Narelle Montgomery, and Vice Chair, Mr. Daniel Fernando, all members of the Sessional Committee and the Scientific Council, all other delegates, and the Chairs of the Working Groups. She highlighted the Committee's work on migratory species and health, and the flagship report on the Conservation Status of Migratory Species. Before the close of the meeting, she thanked her colleagues in the Secretariat, especially Mr. Marco Barbieri, Ms. Melanie Virtue and the Conference Services Team. She closed by thanking the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety for their in-kind provision of interpreters.
- 226. The Chair closed the meeting, summarizing the great progress made, and concluding that all the CRPs, and proposed Programmes of Work and Intersessional Working Groups had all been approved. The online format had benefits as well as drawbacks, and uncertainty remained about how and when the next meeting would take place.

ANNEX 1

WORKING GROUPS THAT WERE AGREED AT THE 5TH SESSIONAL COMMITTEE MEETING

WORKING GROUP TITLE	DURATION	REPORTING TO	FORESEEN MEMBERSHIP (as per the Terms of Reference)	NOTES/COMMENTS
Intersessional Working Group (IWG) investigating the mal-treatment and mutilation of seabirds in fisheries	2021-2023	ScC-SC6	 Range States identified in the published paper (Brazil, Uruguay, Argentina) Representatives of the Sessional Committee with concerns about their migratory seabird populations Experts from ACAP Other interested members and observers Other seabird and fisheries experts as appropriate 	Terms of Reference for the Intersessional Working Group investigating the Mal-treatment and Mutilation of Seabirds in Fisheries CMS
IWG on the Asiatic Cheetah	2021-2023	ScC-SC6	 Range States concerned African regional representatives of the Sessional Committee Experts from the IUCN Other interested members Other experts as appropriate. 	Terms of Reference for the Intersessional Working Group on the Asiatic Cheetah CMS
IWG on the conservation and management of the cheetah (Acinonyx jubatus) and African wild dog (Lycaon pictus)	2021-2023	ScC-SC6	 Range States concerned African regional representatives of the Sessional Committee Experts from the IUCN SSC Cat Specialist Group Any other experts invited by the Secretariat 	Establishment of an Intersessional Working Group on the Conservation and Management of the Cheetah (Acinonyx jubatus) and African Wild Dog (Lycaon pictus) CMS

WORKING GROUP TITLE	DURATION	REPORTING TO	FORESEEN MEMBERSHIP	NOTES/COMMENTS
CMS ScC IWG on Ecological Connectivity	2021-2024	ScC-SC meetings	 (as per the Terms of Reference) ScC members ScC observers 	Terms of Reference for the CMS Scientific Council Working Group on Ecological Connectivity CMS - The WG is expected to maintain a balance of gender, regional representation and taxonomic categories of expertise - The WG will stand until the first ScC-SC meeting after COP14, at which point, the SC can decide whether the group should continue for the following OP144
CMS ScC IWG on Migratory Species and Health	Open	ScC	 Members of the CMS ScC; Representatives of the Scientific Task Force on Avian Influenza and Wild Birds; Representatives of the Preventing Poisoning Working Group; Representatives of the Aquatic Wild Meat Working Group; Representatives from CMS instruments, including, but not limited to, EUROBATS and AEWA; Representatives of UNEP, WHO, OIE, and FAO; Representatives of other relevant MEAs; Representatives from other international wildlife health expert groups including IUCN Wildlife Health Specialist Group, OIE Working Group on Wildlife and Wildlife Disease Association; Independent experts which can be co-opted on an ad hoc basis as necessary and appropriate; Representatives from NGOs with specialism relevant to migratory species and ecosystem health. 	Terms of Reference of the CMS Scientific Council Working Group on Migratory Species and Health CMS

WORKING GROUP TITLE	DURATION	REPORTING TO	FORESEEN MEMBERSHIP (as per the Terms of Reference)	NOTES/COMMENTS
IWG on linear infrastructure and migratory species	2021-2023	ScC-SC6	 Scientific Council members; National Governments, represented by both (i) Environmental Ministries and Wildlife Agencies, and (ii) ministries responsible for the planning of major linear infrastructure works (e.g. transport or energy department); CMS Family Working Groups and Task Forces; Infrastructure sector; Impact assessment community, such as through the International Association for Impact Assessment; International Financial Institutions; Scientific community involved in migratory species and infrastructure issues; Global biodiversity data portals, such as the Convention on Biological Diversity, IPBES and infrastructure platforms; International NGOs. 	Terms of Reference for the Intersessional Working Group on Linear Infrastructure and Migratory Species CMS The WG has an explicit mandate only for the intersessional period between COP13 and COP14, however the type of tasks and the articulation of the membership would suggests an open WG
IWG on the Definition of the Terms "Range State" and "Vagrant"	2021-2023	ScC-SC6	ScC membersScC observers	Terms of Reference for the Intersessional Working Group on the Definition of the terms "Range State" and "Vagrant" CMS
IWG on the Disaggregation of higher taxa listed on Appendix II	2021-2023	ScC-SC6	 COP-appointed Councillor for Birds Other representatives of the Sessional Committee Other experts as appropriate. 	Terms of Reference for an Intersessional Working Group on the Disaggregation of higher Taxa listed on Appendix II CMS

ANNEX 2

LIST OF PARTICIPANTS

SESSIONAL COMMITTEE MEMBERS				
COP-APPOINTED MEMBERS				
Barry Baker	Institute for Marine and Antarctic Studies, University of Tasmania	barry.baker@latitude42.com.au		
Robert Clay	Western Hemisphere Shorebird Reserve Network, Manomet Center for Conservation Sciences	rclay@manomet.org		
Colin Galbraith	Joint Nature Conservation Committee	colingalbraith3@gmail.com		
Stephen Garnett	Charles Darwin University	stephen.garnett@cdu.edu.au		
Rima Jabado	Elasmo Project	rimajabado@hotmail.com		
Giuseppe Notarbartolo di Sciara	Tethys Research Institute	disciara@gmail.com		
Alfred Oteng-Yeboah	University of Ghana	alfred.otengyeboah@gmail.com		
Mark Simmonds	Humane Society International	mark.simmonds@sciencegyre.co.uk		
Fernando Spina	Istituto Superiore Protezione e Ricerca Ambientale ISPRA	fernando.spina@isprambiente.it		
	PARTY-APPOINTED MEMBERS			
AFRICA				
Djibril Diouck	Senegal, Direction des Parcs Nationaux	djibrildiouck@hotmail.com		
Edson Gandiwa	Zimbabwe, Parks and Wildlife Management Authority	egandiwa@zimparks.org.zw		
Stephen Fred Okiror	Uganda, Ministry of Tourism, Wildlife and Antiquities	sfokiror@gmail.com		

ASIA				
Daniel Fernando (Vice-chair)	Sri Lanka, Blue Resources Trust	daniel@blueresources.org		
Hany Tatwany	Saudi Arabia, Arabian Leopard Fund	h.tatwany@rcu.gov.sa		
EUROPE				
João Loureiro	Portugal, Institute of Nature Conservation and Forests	joaoloureiro@icnf.pt		
Rubén Moreno-Opo	Spain, Ministry for the Ecological Transition	rmorenoopo@miteco.es		
Daliborka Stankovic	Serbia, Natural History Museum Belgrade	daliborkabstankovic@gmail.com		
OCEANIA				
Narelle Montgomery (Chair)	Australia, Department of Agriculture, Water and the Environment	narelle.montgomery@environment.gov.au		
Saras Sharma	Fiji, Ministry of Fisheries	saras.sharma0205@gmail.com		
Graeme Taylor	New Zealand, Department of Conservation	gtaylor@doc.govt.nz		
SOUTH & CENTRAL AMERICA	AND THE CARIBBEAN			
Carlos Orrego	Costa Rica, Ministerio de Ambiente y Energía	carlos.orrego@sinac.go.cr		
Patricia Pereira Serafini	Brazil, CEMAVE/ICMBio/MMA	patricia.serafini@icmbio.gov.br		
Hector S. Vera-Alcaraz	Paraguay, Ministerio del Ambiente y Desarrollo Sostenible	hsveraalcaraz@gmail.com		
SESSIONAL COMMITTEE ALTERNATES				
Jean-Philippe SIBLET	France, National Museum of Natural History	siblet@mnhn.fr		
James Williams	United Kingdom, Joint Nature Conservation Committee	james.williams@jncc.gov.uk		

SCIENTIFIC COUNCIL OBSERVERS				
Francisco Aceituno	Honduras, Secretaria de Recursos Naturales y Ambiente,	aceitunof@yahoo.com		
Roseline C. Beudels-Jamar de Bolsée	Belgium, Institut Royal des Sciences Naturelles de Belgique	roseline.beudels@skynet.be		
Patric Lorgé	Luxembourg, Ministry of Environnement / BirdLife	motlugens@gmail.com		
	PARTY OBSERVERS			
Daniel Ramadori	Argentina, Ministerio de Ambiente	edramadori@ambiente.gob.ar		
Vanesa Tossenberger	Argentina, Consultor Ministerio de Ambiente	vanesa.tossenberger@gmail.com		
Veronica Alberto Barros	Brazil, Ministry of Environment	veronica.barros@mma.gov.br		
Ceres Belchior	Brazil, Ministry of Environment	ceres.belchior@mma.gov.br		
Krishna Bonavides	Brazil, Ministry of Environment	krishna.bonavides@mma.gov.br		
Tatiani Chapla	Brazil, Ministry of Environment	tatianichapla@gmail.com		
Carlos Henrique Targino	Brazil, Ministry of Environment	carlos.targino@mma.gov.br		
Charles-Henri de Barsac	France, Ministère de l'Ecologie, du Développement durable et de l'Energie	charles-henri.de-barsac@developpement- durable.gouv.fr		
Jürgen Friedrich	Germany, Federal Ministry for the Environment (BMU)	Juergen.Friedrich@bmu.bund.de		
Oliver Schall	Germany, Federal Ministry for the Environment (BMU)	Oliver.Schall@bmu.bund.de		
Nele Tschense	Germany, Federal Ministry for the Environment (BMU)	Nele.Tschense@bmu.bund.de		
Gergő Nagy	Hungary, Ministry of Agriculture, Department for Nature Conservation	gabor.gergo.nagy@am.gov.hu		
Sasikumar Cherukulappurathu	India, Ministry of Environment Forest and Climate Change	sasi.kumar@nic.in sasiwlindia@gmail.com		

Suresh Kumar	India, Wildlife Institute of India	suresh.wii@gmail.com		
Sunil Sharma	India, Ministry of Environment Forest and Climate Change	ms293.ifs@nic.in		
Akram Mirzakhani	Iran, Ministry of Foreign Affairs	mirzakhani.mfa@gmail.com		
Zahra Elahi Rad	Iran, Department of Environment	elahirad.zahra@gmail.com		
Narindra Andriamialy	Madagascar, Ministère de l'Environnement et du Développement Durable	narindrandriamialy@gmail.com		
Jesy Rajaonasolo	Madagascar, Ministère de l'Environnement et du Développement Durable	jesirajaona@gmail.com		
Alexandra Macdonald	New Zealand, Department of Conservation	almacdonald@doc.govt.nz		
Lady Amaro	Perú, Servicio Nacional Forestal y de Fauna Silvestre	lamaro@serfor.gob.pe		
Jessica Galvez-Durand	Perú, Servicio Nacional Forestal y de Fauna Silvestre	jgalvez@serfor.gob.pe		
Doris Rodriguez	Perú, Servicio Nacional Forestal y de Fauna Silvestre	drodriguez@serfor.gob.pe		
Sabine Herzog	Switzerland, Federal Office for the Environment	sabine.herzog@bafu.admin.ch		
Helen Ford	United Kingdom, Joint Nature Conservation Committee	helen.ford@jncc.gov.uk		
Alison Littlewood	United Kingdom, Joint Nature Conservation Committee	Alison.littlewood@jncc.gov.uk		
Sarah Scott	United Kingdom, Joint Nature Conservation Committee	sarah.scott@jncc.gov.uk		
Andrew Twelves	United Kingdom, Joint Nature Conservation Committee	andrew.twelves@ed.ac.uk		
IGOs				
Alexandra Kalandarishvili	International Council for Game and Wildlife Conservation	alexkalandarishvili97@gmail.com		
Shane Mahoney	International Council for Game and Wildlife Conservation	shane@conservationvisions.com		

Mark Ryan	International Council for Game and Wildlife Conservation	m.ryan@cic-wildlife.org
Kristine Meise	Common Wadden Sea Secretariat	meise@waddensea-secretariat.org
Christine Breitenmoser	IUCN	ch.breitenmoser@kora.ch
Dao Nguyen	IUCN	dao.nguyen@iucn.org
David Mallon	IUCN SSC Antelope Specialist Group	dmallon7@gmail.com
Patricia Moehlman	IUCN SSC Equid Specialist Group	pdmbhf@aol.com
John Carlson	Sharks MOU Advisory Committee	john.carlson@noaa.gov
Jim Ellis	Sharks MOU Advisory Committee	jim.ellis@cefas.co.uk
Aude Caromel	UNEP-WCMC	aude.caromel@unep-wcmc.org
Frances Davis	UNEP-WCMC	frances.davis@unep-wcmc.org
Kelly Malsch	UNEP-WCMC	Kelly.Malsch@unep-wcmc.org
Aly Pavitt	UNEP-WCMC	aly.pavitt@unep-wcmc.org
	NGOs	
Christiane Röttger	Adelphi	roettger@adelphi.de
Nicola Crockford	BirdLlfe International	nicola.crockford@rspb.org.uk
Vicky Jones	BirdLife International	vicky.jones@birdlife.org
Gabriel Fava	Born Free Foundation	gabriel@bornfree.org.uk
Mark Jones	Born Free Foundation	markj@bornfree.org.uk

Laurie Marker	Cheetah Conservation Fund	director@cheetah.org
Shira Yashphe	Cheetah Conservation Fund	shira@cheetah.org
Linda Wong	China Biodiversity Conservation and Green Development Foundation	linda.wong@cbcgdf.org
John J. Jackson III	Conservation Force	jjjiii@att.net
Marco Pani	Conservation Force	pani.marco@gmail.com
Orion Cruz	Defenders of Wildlife	OCruz@defenders.org
Konstantina Katrimpouza	European Federation for Hunting and Conservation (FACE)	konstantina.katrimpouza@face.eu
Stanislas Sibille	European Federation for Hunting and Conservation (FACE)	stanislas.sibille@face.eu
Rebecca Regnery	Humane Society International	rregnery@hsi.org
Matthew Collis	International Fund for Animal Welfare (IFAW)	mcollis@ifaw.org
Megan O'Toole	International Fund for Animal Welfare (IFAW)	motoole@ifaw.org
Barbara Slee	International Fund for Animal Welfare (IFAW)	bslee@ifaw.org
Gonzalo Araujo	Marine Research and Conservation Foundation	ulilbc@gmail.com
Maximin Djondo	OceanCare/BEES NGO	mdjondo@oceancare.org
Nicolas Entrup	OceanCare	nentrup@oceancare.org
Fabienne McLellan	OceanCare	fmclellan@oceancare.org
Karen Wood	Panthera	kwood@panthera.org
Joseph Goergen	Safari Club International Foundation	jgoergen@safariclub.org

Daniel Kachelriess	Sea Shepherd Legal	daniel@seashepherdlegal.org
Catherine Pruett	Sea Shepherd Legal	catherine@seashepherdlegal.org
Brett Sommermeyer	Sea Shepherd Legal	brett@seashepherdlegal.org
Philippa Brakes	Whale and Dolphin Conservation (WDC)	philippa.brakes@whales.org
Nicola Hodgins	Whale and Dolphin Conservation (WDC)	nicola.hodgins@whales.org
Taej Mundkur	Wetlands International	taej.mundkur@wetlands.org
Margi Prideaux	Wild Migration	margi@wildmigration.org
Timothy Collins	Wildlife Conservation Society (WCS)	tcollins@wcs.org
Alfred DeGemmis	Wildlife Conservation Society (WCS)	alfred.degemmis@gmail.com
Susan Lieberman	Wildlife Conservation Society (WCS)	slieberman@wcs.org
Kirk Olson	Wildlife Conservation Society (WCS)	kolson@wcs.org
Sarah Durant	Zoological Society of London (ZSL)	sarah.durant@ioz.ac.uk
	CMS AGREEMENTS	
Mark Tasker	ACAP	mltasker@aol.com
Simone Panigada	ACCOBAMS	panigada69@gmail.com
Olivier Biber	AEML WG	o.biber@bluewin.ch
Jenny Renell	ASCOBANS	Jenny.renell@un.org
Ruth Cromie	AEWA	ruth.cromie@outlook.com

Sergey Dereliev	AEWA	sergey.dereliev@un.org
Suren Gazaryan	EUROBATS	suren.gazaryan@un.org
	CMS SECRETARIAT	
Amy Fraenkel	CMS Executive Secretary	amy.fraenkel@un.org
Aydin Bahramlouian	CMS Secretariat	aydin.bahramlouian@un.org
Marco Barbieri	CMS Secretariat	marco.barbieri@un.org
Catherine Brueckner	CMS Secretariat	catherine.brueckner@un.org
Ximena Cancino Ordenes	CMS Secretariat	ximena.cancino@un.org
Laura Cerasi	CMS Secretariat	laura.cerasi@un.org
Andrea Dekrout	CMS Secretariat	dekrout@un.org
Heidrun Frisch-Nwakanma	CMS Secretariat	heidrun.frisch-nwakanma@un.org
Umberto Gallo-Orsi	CMS Secretariat	umberto.galloorsi@un.org
Lyle Glowka	CMS Secretariat	lyle.glowka@un.org
Sofi Hinchliffe	CMS Secretariat	sofi.hinchliffe@un.org
Melanie Jakuttek	CMS Secretariat	melanie.jakuttek@un.org
Florian Keil	CMS Secretariat	florian.keil@un.org
Veronika Lenarz	CMS Secretariat	veronika.lenarz@un.org
Tine Lindberg-Roncari	CMS Secretariat	tine.lindberg-roncari@un.org

Clara Nobbe	CMS Secretariat	clara.nobbe@un.org
Maria Jose Ortiz	CMS Secretariat	maria-jose.ortiz@un.org
Andrea Pauly	CMS Secretariat	andrea.pauly@un.org
Iván Ramírez Paredes	CMS Secretariat	ivan.ramirez@un.org
Bettina Reinartz	CMS Secretariat	Bettina.Reinartz@un.org
Tilman Schneider	CMS Secretariat	tilman.schneider@un.org
Melanie Virtue	CMS Secretariat	melanie.virtue@un.org
Nora Weyer	CMS Secretariat	nora.weyer@un.org
Ian Redmond	CMS Secretariat Ambassador	ele@globalnet.co.uk
Laetitia Nunny	CMS Secretariat Consultant	laetitianunny@hotmail.com
Clairie (Foteini) Papazoglou	CMS Secretariat Consultant	foteini.papazoglou@cms.int
M. Irene Rizzo	CMS Secretariat Consultant	maria.irene-rizzo@cms.int
Vittoria Semplici	CMS Secretariat Consultant	vittoria.semplici.cms@gmail.com
Roel Slootweg	CMS Secretariat Consultant	sevs@sevs.nl
Arc'hantael Labriere	CMS Secretariat Intern	archantael.labriere@cms.int
Olaolu Matemilola	CMS Secretariat Intern	olaoluwa.matemilola@cms.int
Jennifer Pytka	CMS Secretariat Intern	jennifer.pytka@cms.int
Manon Seyssaut	CMS Secretariat Intern	m.seyssaut@gmail.com

Helene Tao	CMS Secretariat Intern	helene.tao@cms.int
Nadine Vogt	CMS Secretariat Intern	nadine.vogt@cms.int
REPORT WRITER AND INTERPRETERS		
Simon Delany	Report Writer	simondelany3@gmail.com
Caroline Bechtold	Bundesministerium für Umwelt und Naturschutz, (BMU)	caroline.bechtold@bmu.bund.de
Ines Chavarria Waschke	Bundesministerium für Umwelt und Naturschutz, (BMU)	dechava@gmx.de
Angelika Haarkamp	Bundesministerium für Umwelt und Naturschutz, (BMU)	haarkamp@catalyst.de
Sabine Jäck	Bundesministerium für Umwelt und Naturschutz, (BMU)	sabine.jaeck@bmu.bund.de
Britta Klapproth	Bundesministerium für Umwelt und Naturschutz, (BMU)	mail@dolmetschteam.de
Frauke König	Bundesministerium für Umwelt und Naturschutz, (BMU)	Frauke.Koenig@bmu.bund.de
Viviana Puhlmann	Bundesministerium für Umwelt und Naturschutz, (BMU)	v.puhlmann@aiic.net
Fernanda Vila Kalbermatten	Bundesministerium für Umwelt und Naturschutz, (BMU)	contact@vilakalbermatten.com