

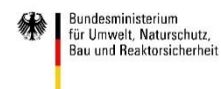
**Workshop on Migratory Species and  
Climate Change: Regional Approach, Practical Measures and Examples  
(CCWS2017)**

Bonn, Germany, 20 - 21 February 2017

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## REPORT OF THE MEETING

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## Table of Contents

Acronyms.....	3
1. Welcome and introductions – round table.....	4
2. Overview of Climate Change and CMS .....	5
3. Background and purpose of the workshop: Resolution 11.26 and the Programme of Work.....	7
4. Session 1 – Consideration of how to structure the discussions and reporting from the workshop .....	7
5. Session 2 - Collation of key examples of climate change impacts on species and the detail of their response .....	10
6. Session 3 - Identification and promotion of practical measures.....	11
Identification of key needs and assessment of relative urgency .....	11
How to facilitate action to help limit any impacts – what works in practice? .....	11
Collation of “Good Practice” examples – where actions are succeeding.....	13
Identification of barriers to action .....	14
7. Session 4 - Development of a regional approach.....	16
BirdLife/AEWA presentation on site based conservation initiatives.....	17
Sakhile Koketso (CBD) Presentation on the work of CBD.....	18
8. Session 5 - Making the Programme of Work operational .....	17
CMS Appendices .....	20
Communications.....	20
Species and Ecosystems .....	20
Capacity .....	20
Critical Sites and Sensitive Zones.....	21
9. Session 6 - Conclusions and mapping out a timeline for action .....	21
Identification of a timeline leading up to the CMS COP .....	21
Identification of a timeline for developing project(s).....	22
Follow-up action required from the workshop .....	22
10. Closure of the workshop.....	23
ANNEX I – List of Participants .....	24

## Acronyms

ACCOBAMS	Agreement on the Conservation of Cetaceans in the Black Sea, Mediterranean Sea and Contiguous Atlantic Area
AEWA	Agreement on the Conservation of African-Eurasian Migratory Waterbirds
ASCOBANS	Agreement on the Conservation of Small Cetaceans in the Baltic, North East Atlantic, Irish and North Seas
BTO	British Trust for Ornithology
CBD	Convention on Biological Diversity
COP	Conference of the Parties
CMS	Convention on the Conservation of Migratory Species of Wild Animals
CSN	Critical Site Network
GEF	Global Environment Facility
HIS	Humane Society International
IBAs	Important Bird Areas
IKI	Internationale Klimaschutzinitiative / International Climate Initiative
IOSEA	Indian Ocean-South-East Asian Marine Turtle Memorandum of Understanding
IUCN	International Union for Conservation of Nature
MEAs	Multilateral Environment Agreements
MOU	Memorandum of Understanding
NAPA	National Adaptation Programmes of Action
NAPs	National Adaptation Plans
NBSAPs	National Biodiversity Strategies and Action Plans
NGO	Non-Governmental Organization
POW	Programme of Work
SDGs	Sustainable Development Goals
SPA	Special Protection Area
SPBD	Strategic Plan for Biodiversity
SSSI	Sites of Special Scientific Interest
UNCCD	United Nations Convention to Combat Desertification
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
ZSL	Zoological Society of London

## 1. Welcome and introductions – round table

1. Bradnee Chambers, the Executive Secretary of CMS, welcomed participants to the UN Campus in Bonn, pointing out that the city had hosted the Meeting of G20 foreign ministers the previous week, when one of the issues raised by protesters outside the conference venue had been climate change. Climate change and its effects on the environment were among the most pressing challenges facing humanity. Mr. Chambers said that he attended meetings and raised climate change from the perspective of wildlife conservation, and recalled that the Convention had been addressing the issue for over twenty years. In that time, various Resolutions had been adopted, an ad hoc Working Group of the Scientific Council established and a comprehensive Programme of Work (POW) agreed.
2. There were many impacts on species arising from climate change. While there were still some knowledge gaps, there was much evidence that climate change was affecting species in a wide variety of ways. For example, the sex ratios of turtles were changing as the temperature of their nesting beaches increased. Changes such as increased rainfall affecting habitats, sea level rises and the disruption and the timing of migration and the availability of food were all being seen around the world. Extreme weather events were becoming more frequent and more devastating.
3. The Convention, which provided a forum through which Parties could act in concert, had to respond and offer solutions. The POW contained a number of actions and these needed to be implemented.
4. Mr. Chambers concluded his comments by saying that while the Working Group was small in number, it contained a number of key players, and would be presided over by Colin Galbraith (CMS COP-Appointed Scientific Councillor for Climate Change and Chair of the Working Group), who would be assisted by Marco Barbieri, the Science Adviser from the Secretariat, so the meeting would be in capable hands.
5. The Chair, Colin Galbraith thanked the Executive Secretary for his commitment to and interest in climate change and its impacts on migratory species. He agreed entirely with the sentiments expressed by the Executive Secretary in his opening remarks, saying that climate change was a global problem affecting mankind and wildlife alike.
6. One question that the workshop would have to address was to identify what the Convention was to do next after twenty years of addressing climate change. While the Convention text made reference to the historic range of species (Article 1.1 (4)), the Resolution adopted at COP11 introduced a fundamentally new concept, urging action to be taken on the basis of prediction of the future effects of climate change on species' range and behaviour.
7. The present meeting was the second workshop on climate change, the first having been held in Costa Rica, where a solid foundation had been laid and good progress made.
8. The Chair concluded his comments by saying that, while some sceptics maintained that nothing could be done to prevent the effects of climate change on wildlife, in truth, there was a great deal that could be achieved.
9. A tour de table was conducted allowing the participants to introduce themselves and explain their involvement in the Convention and its work related to climate change. A full list of participants, including both those present and those connected remotely, appears as Annex I to this report.

## 2. Overview of Climate Change and CMS

10. The Chair briefly ran through the programme of the Workshop and invited the Secretariat to make a presentation setting out the major milestones in the development of the Convention's policies and actions related to climate change.

11. Marco Barbieri (CMS Secretariat) explained that the first COP decision was [Recommendation 5.5](#) adopted in 1997 under which the Scientific Council Working Group on Climate Change had been established. COP8 in 2005 had considered a major review, "[Climate Change and Migratory Species](#)", commissioned by the UK Environment Ministry (Defra) and had adopted [Resolution 8.13](#).

12. COP9 had adopted [Resolution 9.7](#) in 2008 and COP10 had adopted [Resolution 10.19](#) both setting out a comprehensive range of new policies.

13. A number of studies and other publications had also been prepared as well as a set of indicators published in 2008. The Zoological Society of London (ZSL) had undertaken a project and a technical workshop had been held in Arles, France in 2011. CMS was also cooperating with other Multilateral Environment Agreements (MEAs) and with the IUCN.

14. A workshop was held in Costa Rica in April 2014 in preparation for COP11 in Quito. COP11 adopted [Resolution 11.26](#) which established the POW on climate change and migratory species.

15. The slides making up the Secretariat's presentation can be found on the meeting webpage on the CMS website. All the COP resolutions and recommendations relating to climate change were reproduced as [information documents](#) for the current meeting and are readily available on the CMS website.

16. The Chair said that the presentation set out clearly the context in which the next steps had to be agreed. These would include short-, medium- and long-term actions and a holistic approach would be required, focussing on key global problems. Partners and resources would have to be sought.

17. Measures would be needed to facilitate adaptation and one of the major challenges would be to communicate the science to policy-makers. Existing knowledge should be used to prioritize action now. There was no time for another ten-year review, and implementation had to start as soon as possible. For example, the Chair asked participants to consider over the duration of the meeting what advice they would give to ministers and what priorities they would set in terms of possible mitigation or adaptation to climate change.

18. The Chair pointed out that COP12 was approaching and it would provide the Convention with a global stage. Membership of the Convention was now 124, so a large number of Governments were contributing and listening to the Convention's thinking on climate change.

19. Turning to the agenda, the Chair encouraged participants to contribute their ideas and to view the programme for the meeting as a guide rather than a straitjacket.

20. Mark Simmonds (HSI) said that one challenge was overcoming the scepticism toward climate change and a wide range of misconceptions surrounding the subject. It was necessary to communicate the science more effectively in terms that lay people could understand.

21. The Executive Secretary agreed, saying that he doubted that more scientific research was the only answer and that better means of communicating the message to politicians and the public should be devised. Climate change was affecting economic wellbeing, for example, with the loss of species damaging revenues from wildlife tourism, reducing revenues in Kenya and the United Republic of Tanzania, with the great animal migrations across the Serengeti in danger of disappearing. The scientific data were available and needed to be presented more persuasively, e.g. by quantifying monetary losses. However, as well as describing problems, the Convention should offer solutions.

22. James Pearce-Higgins (BTO) agreed that communication was a crucial element in order to improve understanding of the impacts of climate change and what adaptation measures could be taken. Species were also facing more immediate pressures, and many of the impacts of climate change lay in the future and scientific predictions were based on models and were subject to uncertainties. Climate change was not just a threat by itself but a threat multiplier making other factors worse.

23. The Chair said that if predictions were a weakness because of their inherent uncertainty, it might be advisable to concentrate attention on the effects of climate change that were already apparent.

24. Edward Perry (BirdLife International) concurred with other comments made about communications and the need to find the right message. He said that species could be used as indicators and cited the example of the Audubon Society in the USA, which was running a project seeking to promote action on climate change through political persuasion, building on the fact that most US States had a State bird with which people identified. He agreed that it was important to offer solutions and that the message should not be "all doom and gloom". He welcomed the presence of a representative of the CBD Secretariat at the meeting, given the importance of healthy ecosystems for biodiversity and people, and the need for MEAs to work together. He also stressed that human responses to climate change could take place at the community level as well as through national and international efforts.

25. Wisdom Dlamini (Swaziland) also agreed with the comments made about communications. He added that in the Southern Africa region, there was evidence of the effects of climate change on the environment, compounding the impact of agriculture and energy installations on the habitats of migratory species.

26. Monika Boehm (ZSL) had seen a recent paper on the IUCN Red List and the threats that the species were facing, and climate change scored low for immediacy, habitat loss being the most imminent threat. It was important to ensure that this assessment was not misinterpreted as dismissing the importance of climate change.

27. The Chair agreed; the individual threats should not be compared but combined. Stating that one category of threat was worse than another simply fuelled the short-termism and missed the point about the need to combine threats into a holistic assessment.

28. Sakhile Koketso (CBD Secretariat) said that a decision taken at its tenth meeting of the Conference of the Parties had changed the way that CBD dealt with climate change, with the focus being on ecosystem-based mitigation. This had required CBD to engage with other interest groups beyond its more familiar nature and environment constituencies.

29. The Executive Secretary said that, as CMS was a species-based convention with a specific niche in the climate change debate, it might be more appropriate for a broader-based MEA such as CBD to engage in general policy discussions. He referred to a recent article on the effects of climate change published in Nature Climate Change, but said that it was too general, stating the percentage of species from different orders that were being adversely affected. The article lacked the type of specific information that was needed to persuade ministers and others to take action.

30. The Chair said that he and the Secretariat would note specific examples and information as they occurred over the course of the workshop for inclusion in a theoretical brief to ministers following the conclusion of the workshop.

### **3. Background and purpose of the workshop: Resolution 11.26 and the Programme of Work**

31. The Chair referred to Information Document [UNEP/CMS/CCWS2017/Inf.6](#), “Literature Relevant for the Workshop – a Preliminary Compilation”, containing a review of research undertaken and giving examples of best practice. This useful document had been prepared very quickly and effectively by one of the interns working in the Secretariat. The Secretariat would welcome being notified of any other good examples of mitigation or adaptation action.

32. The Chair noted that the workshop might also consider potential project proposals and that participants should consider what specific projects might be required and how these could be developed and funded.

33. The workshop should also consider what outputs it might prepare for submission to the COP, which could include a draft resolution in addition to a paper and a report.

34. Mr Barbieri (CMS Secretariat) explained that a process of consolidating past resolutions was being undertaken by a consultant hired by the Secretariat. The climate change cluster of decisions had been reviewed, and participants at the workshop were invited to comment on which provisions needed to be retained and whether any could be repealed. This process did not preclude addition of new provisions at future COPs.

35. In summarizing the discussions so far, the Chair said that the main points raised had been: communication; identifying current changes and projecting future impacts; identifying key species and examples of successful mitigation policies; migratory species and why they were of value to humans; providing solutions as well as describing problems; the need for wide-ranging cooperation and the importance of providing evidence to back up the arguments for action.

### **4. Session 1 – Consideration of how to structure the discussions and reporting from the workshop**

36. The Chair asked which of the three approaches - species group (e.g. mammals, birds, insects), habitat type (e.g. marine, freshwater, terrestrial) and region (e.g. Americas, Africa, Asia) - the participants thought would work best.

37. Mr. Simmonds (HSI) asked what deadlines applied to the workshop’s outputs. The Chair said that some decisions would be needed soon but some of the products could be rolling documents subject to periodic updating. No final decision had been taken regarding precisely what would be submitted to the COP, the dates of which were known (23-28 October 2017) as were the deadlines for submitting documents.

38. Mr. Simmonds said that given the uncertainties surrounding modelling and predictions, the plight of certain species could provide evidence of the effects of climate change now. He referred to the Polar Bear (*Ursus maritimus*), a picture of which was at that time being projected on screen. This species was facing obvious threats such as the loss of habitat due to retreating ice cover. Three cetacean species, including the Narwhal (*Monodon monoceros*), in the High Arctic were also suffering pressure related to climate change.

39. The Chair suggested that one idea could be to choose ten or so species from across the world and from different taxa to illustrate the impacts occurring because of climate change. Having a range of species examples from around the world, would help demonstrate the variety of impacts being seen and would make the point that climate change was pervasive.

40. Regarding the degrees of uncertainty around modelling, Mr. Pearce-Higgins (BTO) said that a study had been made of 3,000 species, of which 400 had been researched in greater detail resulting in a clearer understanding of the processes taking place. Nevertheless, there was still low confidence in projections. It was difficult to say what would happen precisely to any one particular species, but assessments of groups of species seemed to be more robust. There were few species where it could be asserted that climate change was driving losses separate from other threats, other than some polar inhabitants (Adélie Penguins (*Pygoscelis adeliae*), Polar Bears). Some populations were being adversely affected and some species living at the extremes were running out of places in which to move, while other species were adapting and could expand or change their range. Some were even benefitting from climate change, at least in the short term.

41. Mr. Perry (BirdLife International) agreed that there was a great deal of evidence showing the effects of climate change on species. It was necessary to communicate better what was known, and concrete measures should be proposed even though the projections indicated a range of possible outcomes. There were examples which bore out the projections accurately. With regard to an illustrative species, he suggested the Common Loon (*Gavia immer*).

42. The Chair requested that Mr. Perry and Mr. Pearce-Higgins draft a one-paragraph overview of the effects of climate change on migratory species that would provide context for specific examples of impact.

43. The Chair asked participants to provide information on examples where the impact of climate change on migratory species was apparent.

44. Gina Gisella Cuza Jones (Costa Rica) said that measures were being taken in her country to protect marine turtles and other species in National Parks along the coast where the effects of sea level rise were already causing problems. For the past five to six years Costa Rica had been working with neighbouring countries in the spirit of its membership of CMS.

45. Heidrun Frisch-Nwakanma (IOSEA MOU) said that an assessment carried out by the IUCN of the status of Loggerhead Turtles (*Caretta caretta*) indicated that climate change was a negative factor, reducing nesting success rates and increasing risk to the species in the Indian Ocean and South-east Asian region.

46. Asked to suggest a terrestrial species from Africa, Mr. Dlamini (Swaziland) proposed the Wild Dog (*Lycaon pictus*). Threats in addition to climate change were of more immediate concern for the species, but the African Savannah habitats were undergoing changes to their shrub and tree composition.

47. Ms. Boehm (ZSL) said that the research carried about at the zoo was in part shaped by the animals kept there and by the availability of funds. Not all of the species being considered were migratory. She proposed the Monarch Butterfly (*Danaus plexippus*) as the only insect listed on the CMS Appendices.

48. The Chair pointed out that the last comprehensive review of climate change and the impact on migratory species had been done in 2008, meaning that one of the core documents was therefore quite old and would benefit from being updated.

49. Mr. Simmonds said that as well as species adapted to Arctic conditions, mountain dwelling animals, such as the Snow Leopard (*Uncia uncia*) were losing their habitat.



50. Mr. Barbieri (CMS Secretariat) suggested the Caribou (*Rangifer tarandus caribou*) and both species of Saiga Antelope (*Saiga tatarica* and *S. borealis*). The Saiga had been in the news recently following die-offs in Kazakhstan (2015) and Mongolia (2017) which were possibly linked to climatic conditions.

51. Fani Lamprianidou (Intern, CMS Secretariat) suggested the Magellanic Penguin (*Spheniscus magellanicus*) and marine turtles because of breeding failures. She noted that there was some contradictory evidence surrounding Polar Bears, for which populations had not dropped as much as had been predicted. Mr. Simmonds interjected that there was often conflicting evidence, but referred to the IUCN global warming review presented at the World Conservation Congress in Hawaii, USA, in which experts agreed that it was probable that Polar Bears would be extirpated from 50 per cent of their present range within a short time.

52. Ms. Boehm suggested including a fish among the illustrative species as a representative of a commercially exploited resource. Mr Simmonds said that fish whether taken by humans for consumption or as part of the food chain, should be considered. He added that the modellers and communication experts should meet to discuss the presentation of the evidence to make it easier to understand.

53. Mr. Pearce-Higgins agreed that a fish species should be included as temperature and the oxygen content of water were linked, and many freshwater species were vulnerable. Plankton and sand eels were declining in the North Atlantic disrupting the food chain, but the effects were local as further north the situation was better. Some long distance passerines were declining as a result of changing rainfall in the tropics (Cuckoos and the Willow Warbler (*Phylloscopus trochilus*)).

54. Aradhna Goury (Mauritius) said that communication was helped if the audience had a connection to the subject. Fish were familiar as a food source; birds were ubiquitous and everyone was aware of them; but she questioned whether Snow Leopards would resonate universally. Mr. Simmonds said that Snow Leopards were charismatic, but possibly did leave open the practical question of why it was important to protect them.

55. The Chair moved the discussion on to consider some key geographic areas for migratory species and highlighted the North-east Atlantic and its ecosystems and the African Savannah as areas where the effects of climate change were being seen and effectively recorded.

56. Andrea Pauly (Sharks MOU) saw advantages in adopting a geographic or ecosystem approach, given that for sharks the basic elements of their life cycle were little understood, let alone the effects of climate change on them.

57. Mr. Pearce-Higgins said that there were studies on change in rainfall and the effects on grass and the herbivores that fed on it and their predators. The case studies were however five to six years old.

58. Mr. Barbieri proposed the Central Asia steppes as another habitat suitable for closer consideration, as they hosted many migratory species of interest to the Convention. Nina Mikander (AEWA Secretariat) said that droughts in Central Asia were seen as a threat to bird species in the region.

59. The Chair in summary said that sharks were apex predators and vulnerable to disruptions in the food chain extending down to plankton. The changes to the African Savannah had both ecological and economic repercussions and it had been noted that the Central Asian Steppe hosted mammal and avian species of interest to the CMS Family. The areas mentioned here will be considered further as possible examples to be used in presenting the outputs of the working group to the COP.

60. In response to a request for key examples of ecosystems being impacted by climate change and with a focus on species listed on the CMS Appendices, Clara Klöcker (Intern, CMS Secretariat) suggested reefs as an ecosystem, as these are particularly important for sharks and rays. In a further example, it was highlighted that Caribou were facing loss of habitat in the North.

## **5. Session 2 - Collation of key examples of climate change impacts on species and the detail of their response**

61. The Chair posed the question of how change could be defined and how evidence for change should be reviewed. The Intergovernmental Panel on Climate Change had done a great deal of work but its findings had been attacked by sceptics. The evidence for change was unavoidably imperfect and incomplete given the complexities involved, but without comprehensive monitoring, it was difficult to ascertain how much change was continuing to happen now.

62. Mr. Simmonds (HSI) recalled that a workshop on climate change organized by ACCOBAMS had identified the need to use long-term datasets, and for example, old pieces of baleen could be used to look back in time, so there were sources of evidence beyond living specimens.

63. Mr. Pearce-Higgins (BTO) agreed that long-term data were ideal, making it easier to track fluctuations in populations and linking them to climatic changes. For example, models existed linking rainfall in the Sahel to species numbers. It was also possible to establish proxies. The mechanisms driving the changes could be examined, along with the species interactions, looking at what the animals were feeding on. The next step would be some experimental or manipulative work, using a changed environment, to see what mitigation policies worked. He cited a case in Arizona, where controlling ungulates to protect the undergrowth had benefits for other species.

64. Ms. Boehm (ZSL) referred to the Living Planet Database. According to related research, the number of freshwater species plummeted: and this was being investigated by an MSc student.

65. The Chair turned to the question of how to present an overview of change, pointing out that COP11 had suggested considering pre-emptive work, taking action in areas where particular species may spread into in coming years but in which they were not yet present. The Chair asked whether there were any legal implications with this; for example, some Parties transposed the CMS Appendices into their national legislation, raising the issue of whether it was possible for them to designate sites for species where they did not yet occur.

66. Melissa Lewis (AEWA Technical Committee) said that there should be no problem designating sites in areas where species currently or historically occurred as there were definitions of "range" to cover such circumstances. Under CMS, Parties had obligations relating to protection of habitats of Appendix I species and some CMS Parties were also committed to implement other CMS instruments, such as the Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA).

67. The Chair said that it would be important to ensure that the report of the current workshop be sent to the Secretariats of other CMS instruments, and the parent Convention should be aware of what other parts of the CMS Family were doing with regard to climate change. It was desirable for the members of the CMS Family to align their policies in relation to climate change and on how to tackle its impacts on the ground.

68. The Chair then began consideration of trends, stating that existing evidence indicated that species were being affected by climate change, some in a positive way but mainly negatively. It was likely that species' ranges would alter and in many cases, the range would shrink. There would be new interactions between predator and prey; phenology would be affected; and in the main, populations would decline. Humans would also respond to climate change and, depending on the actions taken there could be even worse consequences for wildlife. It was important to ensure that adaptation methods, seeking to reduce the impact of climate change, did not in themselves lead to unforeseen impacts. It was noted that generalist species might do better in some cases, but specialists would almost certainly lose out. The former would probably be the minority.

69. Mr. Simmonds pointed out that for example, cetaceans extending their range could have an effect on the established resident species (e.g. Orcas (*Orcinus orca*) would prey on Bowhead Whales (*Balaena mysticetus*)). Other processes would deserve to be considered, such as the continuing recovery of Humpback Whales (*Megaptera novaeanglia*) after the cessation of whaling. Species might change the timing of their migration only to find that their food sources were not available.

## **6. Session 3 - Identification and promotion of practical measures**

### Identification of key needs and assessment of relative urgency

70. The Workshop addressed the task of identifying key needs and assessing relative urgency of these. The Chair said that these questions had been addressed in part already through the approval of the programme of work by the COP, but suggested that it would be a good idea to have a list of examples of climate change impacts and of concrete proposals for action based on good practice ready for presentation to the COP. He said that there were already sound assessments of the current and historic conditions, but the weakness was, perhaps, in advising governments on the appropriate action to mitigate the effects on migratory species.

71. Mr. Simmonds (HSI) pointed out that climate change was on the agenda of many fora and CMS could therefore look at the wider implications; it was particularly welcome therefore that CBD was represented at the meeting.

72. Mr. Perry (BirdLife International) suggested looking at how existing threats were being exacerbated and he stressed the importance of connectivity. The establishment of protected areas was a key part of the answer in that they provided a "safety net" for many species, albeit that action was required outside protected areas as well.

73. The Chair said that not long ago it was being argued that protected areas would become irrelevant as a result of climate change and was encouraging that the evidence was showing this not to be the case. The forthcoming COP would provide a platform for demonstrating their vital role.

74. Ms. Klöcker (Intern, CMS Secretariat) said that damaging human activities should be highlighted. For example, coastal defences were being built to guard against rising sea levels but their construction had adverse effects on turtles' nesting beaches in many locations.

### How to facilitate action to help limit any impacts – what works in practice?

75. The Chair stressed the importance of the working group liaising with other similar bodies set up under the Convention, such as the Task Force on Energy and the Flyways Working Group. In introducing the next part of the discussion the Chair asked for suggestions for practical measures that should be implemented immediately.

76. Ms. Koketso (CBD Secretariat) proposed identifying areas of vulnerability; linking threats to wildlife and threats to people and their livelihoods (e.g. the drought in California which was being followed by flooding). With regard to protected areas, it was important to promote their sustainable use rather than impose “no go” areas and highlight their role as corridors to facilitate connectivity. Agricultural practices should be modified – for example, almonds should not be cultivated in drought-prone areas because of their high water requirements and the contribution they can make to spreading wildfires. Assuming that a minister hypothetically receiving the report from this meeting might be more sceptical than sympathetic, it was crucial to offer win-win solutions.

77. Mr. Pearce-Higgins (BTO) proposed measures to increase resilience to climate change, such as the restoration of upland peatlands, and the development of guidance on successful adaptation. There was a body of evidence showing the conservation benefits of protected areas, so policies on how best to manage these landscapes were needed.

78. Julio Rodríguez (Intern, CMS Secretariat) stressed the importance of the role of local communities and indigenous peoples. Efforts should be made to raise their awareness and provide them with incentives to cooperate with conservation programmes. He pointed out the problem of a project relating to turtles that had been discontinued after cessation of its funding. Another project aimed at quantifying ecosystem services had also been discontinued when the government had cut expenditure after the economy went into recession. The Chair agreed about the importance of community involvement, which should entail active participation rather than just consultation.

79. Mr. Dlamini (Swaziland) emphasized the linkage between mitigating climate change and livelihoods. Ideas that created employment were well received by politicians. Protecting habitats should be relevant to people’s way of life and have a human aspect. Swaziland encouraged landscape conservation rather than designating protected areas and was cooperating on transboundary work with South Africa and Mozambique.

80. Ms. Koketso said that the spread of invasive alien species across East Africa was accelerating because of climate change and as some were a vector of disease, human health problems were increasing. The Chair added that in Europe, invasive alien plant species were also affecting habitats.

81. Ms. Lewis (AEWA Technical Committee) said that more permeable landscapes were required and this was not achievable through negative restrictions. Biodiversity concerns had to be considered in the context of other policies. Incentives should be provided for communities and landowners to take positive actions, for example, as was happening through initiatives led by the South African provincial authorities.

82. Ms. Mikander (AEWA Secretariat) said that many tools had been identified and were being deployed by CMS and AEWA. AEWA had recently received assessment of the effects of climate change on its species, and the most vulnerable ones were now being prioritized for Species Action Plans. The most recent Meeting of the Parties (MOP6, 2015) had adopted a Multi-species Action Plan for seabirds, dependent on fish stocks that were being affected by climate change. AEWA was also looking at habitat management and was a partner in a project on climate resilience focussing primarily on Mali and Ethiopia, where local communities were restoring sites for conservation and other human economic uses. This approach could be duplicated to the rest of the AEWA Agreement Area and beyond.

83. Ms. Frisch-Nwakanma (IOSEA MOU) said that it was crucial in the case of turtles facing threats from climate change to reduce the other pressures. There were predictions from Mexico for how the nesting range might shift. The Chair said that the fear was that turtles would eventually run out of suitable beaches on which to lay their eggs.

84. Mr. Simmonds (HSI) said that the causes of climate change should be addressed at source, and agreed that other pressures, such as bycatch, should be tackled. At the global level, the IWC was coordinating efforts to deal with cetacean bycatch, complementing regional approaches under ASCOBANS and ACCOBAMS.

85. For charismatic but exotic species such as the Snow Leopard, the effects of such species disappearing from their environment should be demonstrated. He noted also that after years of concerning itself with quotas for taking whales and seeing them as competitors for fish, the IWC had recently started to consider the role of cetaceans in their ecosystem.

86. Ms. Lamprianidou (Intern, CMS Secretariat) said that consideration should be given to how key sites were managed for migratory species, and this could include seasonal closures for fisheries in marine protected areas.

87. Mr. Pearce-Higgins said that both natural and semi-natural habitats had to be maintained, to provide the refuges into which displaced species moved. The Special Protection Areas (SPA) under the EC Bird Directive was a good example of a regional network, but national and continental approaches were needed for all taxa, protecting coherent migration routes and flyways.

88. Mr. Puchala (Slovakia) said that there were many key areas outside the SPA network, so an integrated management approach was needed to improve site resilience. The Chair agreed with the point regarding the wider landscape saying that protected areas needed a sympathetic context to be effective.

89. Ms. Boehm (ZSL) pointed out that ministers usually held office for around four years and that was a short time scale in terms of species management. She urged that a global rather than just local view be taken and consideration be given to removing obstacles to migration.

90. Mr. Simmonds said that in the marine environment key sites were not static as currents and upwellings changed. He noted that the UK had established a number of small MPAs which worked well for sedentary species but it was now apparent that fishing fleets operated up to the edges of these sites.

91. Mr. Perry was asked about how protected areas worked for a range of bird species and offered to prepare a presentation indicating which approaches had been tried and how well they had achieved their aims. He later gave the presentation to the meeting. It was suggested that the Sustainable Development Goals (SDGs), the Aichi Targets and the Paris Summit in combination could form the basis of an integrated approach. The more linkages CMS could make, the greater the potential traction by linking conservation, development, wildlife and people.

92. On invasive alien species, Mr Simmonds said that the threat of the Zika virus had been brought to the public's attention as the insects carrying it had spread. Diseases were also more dangerous as pollution affected immune systems and the idea that Northern Europe would benefit from having a more Mediterranean climate had to be countered.

#### Collation of "Good Practice" examples – where actions are succeeding

93. The Chair said that policy-makers would expect to be presented with instances of effective practice that have been judged to be successful in mitigating the effects of climate change on migratory species and asked participants if they could provide examples.

94. Mr. Pearce-Higgins was aware of two or three recent papers, mainly with a focus on the United Kingdom, showing how the expansion of species' range had been helped by the protected area network. Sites of Special Scientific Interest (SSSI) were much more likely to be colonized by species expanding their range than would have been expected by chance.

Egrets had come to the UK and at first most were found in SSSIs but they were now spreading out. Sites hosting a large number of species were likely to continue to do so, and species undergoing losses because of contracting habitat were declining less as a result of protected areas.

95. Mr. Perry spoke of climate-smart conservation planning, pointing out that the Eurasian Bittern (*Botaurus stellaris stellaris*) had a preference for coastal sites prone to flooding.

96. Mr. Rodríguez referred to the Ecuadorean Government's excellent [Socio Bosque](#) forest programme directed by Max Lascano. This was a relatively new initiative having only begun in 2008 so had not yet stood the test of time but involved partnerships with landowners and indigenous communities to conserve native forests.

97. Ms. Mikander said that AEWA had some reports from a project in the Russian Federation, where some threatened protected geese that resembled species that could be hunted, were starting their migration at different times. Hunting regimes and hunting seasons were being modified to help ensure the conservation of the threatened species involved.

98. Mr. Barbieri (CMS Secretariat) said that some new material had just been received from Colin Limpus, the COP-appointed Scientific Councillor for Marine Turtles, concerning measures that could be taken to reduce the alterations in the sex ratios of hatchlings caused by changing sand temperatures at nesting beaches. Mr. Simmonds was aware of work being done on the Pacific coast of Costa Rica which involved moving turtle eggs to cooler areas.

### Identification of barriers to action

99. The Chair commented that in comparison with other budgets, the amount of resources available for positive action was minuscule. He asked participants to consider from their experience if there may be other reasons why climate change mitigation measures were not being implemented.

100. Mr. Simmonds said that neither policy-makers nor the public fully understood the science and were not aware of the consequences of not taking action. The loss of Polar Bear habitat did not have an impact on most people's everyday lives, for example.

101. Ms. Boehm pointed to the lack of information and the resultant reluctance to act. As had been said earlier, however, urgent action was needed and there was no time to wait for a fuller picture to emerge. The conservationists' case was weakened by the lack of confidence that the proposed course of action would yield the desired results. There were other calls on finite State resources and mitigating the effects of climate change on wildlife was not seen as a priority. It was noted that international action was required, and mentioned that for example Costa Rica's efforts to protect migratory species were undermined somewhat by other countries in the Region not following this lead. The Chair said that this problem highlighted a key role for the Convention in promoting coordinated international action.

102. Mr. Dlamini identified lack of human as well as financial resources. Conservationists needed to be more persuasive in making the case for the social relevance of biodiversity in the face of competition for resources from infrastructure projects. Innovative use of social media and other modern tools would help. European-style conservation also did not resonate in Africa and mind-sets had to change as problems being faced today were unimaginable just a generation ago, and resources considered inexhaustible were only now recognized as being finite.

103. Ms. Koketso said that in her home country of Botswana 47 per cent of the land area had protected status, but there had been no substantial modification of management practices in the past 50 years.

104. The Chair said that climate change would force us to adapt and some institutional changes would undoubtedly be necessary too.
105. Ms. Lewis said that political will was lacking and more emphasis was placed on development than on conservation. Linking conservation to the SDGs was imperative, and local communities had to have ownership and lose their distrust of conservation actions. A disproportionate emphasis on certain aspects of conservation was taking attention away from other wider conservation issues.
106. Ms. Mikander said that AEWA had examined its Action Plan and considered why Parties could not implement it. Lack of financial resources was the main reason, followed by government agencies lacking in-house expertise. AEWA also had to extend its reach beyond ornithological circles and engage agricultural and other sectors.
107. Ms. Frisch-Nwakanma (IOSEA MOU) said that in addition to the points raised by others which applied equally to IOSEA, a further problem was that solutions that were effective in one locality did not work elsewhere, with the same species reacting differently in different places.
108. Ms. Lamprianidou noted for example, that Greece faced severe financial constraints and that environmental education has large potential for growth. There were also conflicting interests across the Mediterranean where many economic activities were taking place, including tourism, but the eco-tourism sector was underdeveloped.
109. Mr. Pearce-Higgins said that in a report for Natural England focussing on four Special Protection Areas and looking at the effects of agri-environment policies, flooding and water management, it had been found that the constraints of the policy mechanisms did not fit circumstances on the ground. Private landowners were more interested in making a profit than conserving nature, while agencies lacked staff and were not fully coordinating their work with each other effectively.
110. Mr. Perry complained that there was too much short-termism in the policy cycle. It was also necessary to improve cross-sectoral coordination to counter the “silo mentality”. Agencies lacked the capacity to develop tangible solutions. Lack of funding was especially noticeable in East Africa and Central America. Environment Ministries also tended to have less influence than others within government, making it all the more important to have biodiversity included in the mainstream and to emphasis linkages to the Sustainable Development Goals and to the Paris Climate Agreement.
111. Mr. Puchala said that in explaining the problem it also had to be clear what actions were needed. National level approaches had to be complemented by regional initiatives and the opposition of some landowners to conservation efforts had to be overcome.
112. Mr. Simmonds pointed out the difficulty of developing strategies with politicians whose focus tended to be short- to medium-term. It might therefore be advisable to approach ministry-based civil servants as intermediaries to brief them. The message should concentrate on how climate change affected people and wildlife. In Northern Europe, the threat of more storms, more disease and greater food insecurity should be emphasized. The effects on individuals rather than abstract populations would make the message more understandable. The animal welfare lobby could also be recruited as allies.
113. Ms. Klöcker felt that in Germany levels of public awareness were high but this still not translate into action. The immediacy of the threat of floods and disease outbreaks had to be understood.
114. The Chair expressed his gratitude for the many ideas presented and for the comments made. One key message was to focus on communication and to keep the messages as simple as possible.

## 7. Session 4 - Development of a regional approach

115. The key questions considered in this part of the discussion were:

**What are the common needs across regions?**

**What region specific needs are there – and how can these be identified?**

**How could a regional approach to action be developed and coordinated?**

**What are the limitations to such an approach?**

116. Using the CMS definition of “region” meaning continents, the Chair asked how it was possible to develop regional approaches, and how transferable experiences in one area were to other parts of the world.

117. Ms. Cusa Jones (Costa Rica) said that coastal erosion was affecting nesting beaches, and volunteers were working on the reforestation of the coast to prevent the problem. These efforts were beginning to bear fruit with the rate of loss decelerating. Volunteers were also relocating turtle eggs when beaches were damaged. The Government did not have the staff to deploy to such activities but did provide financial support to community efforts.

118. The Chair suggested assessing the quantity of volunteer work dedicated to conservation efforts could provide a useful insight for governments. Some NGOs such as the BirdLife International network also enlisted volunteer help to assist their staff in the field.

119. The Chair stressed the value of adopting a local approach and asked whether there was such a thing as a regional equivalent. He asked if there were any effective examples arising from some of the other CMS Working Groups. Local engagement was vital but some problems were globally present and the basis of the Convention’s work was to bring countries together to find common solutions and to coordinate conservation efforts.

120. Mr. Barbieri (CMS Secretariat) explained that at least in the initial phases the Energy Task Force was concentrating on the African-Eurasian region equating to the Agreement Area of AEWA. The Flyways Working Group had a regional structure and capacity-building was usually delivered in regionally organized meetings. However, the political regions used by CMS did not always correspond with ecological ones.

121. Mr. Pearce-Higgins (BTO) said there were major differences between the regions. The knowledge base varied greatly, with far more data being available in Europe and North America than elsewhere. The drivers of change also differed, with temperature rises being the main factors at the poles and in temperate zones, and rainfall in the tropics. Different processes were at play and the effect of rainfall was less predictable than that of temperature. Most biodiversity hotspots were found in the tropics, where there had been fewer studies.

122. Ms. Mikander (AEWA Secretariat) said that the BTO study of populations of AEWA-listed species had identified the most vulnerable sub-regions, and had therefore enabled actions to be prioritized.

123. Mr. Simmonds (HSI) said that trying to apply a regional approach to the marine environment was even more difficult. Some characteristics were shared – for example, between the Baltic and Black Seas which were almost totally enclosed, between shallow sea habitats such as coral reefs and sea grass meadows, estuaries and mangroves. US legislation had meant that much more was known about cetaceans in the Americas, such as the vaquita (*Phocoena sinus*) in the Gulf of California.

124. The Chairman noted these examples and thanked the participants for their comments.



## 8. Session 5 - Making the Programme of Work operational

125. Key issues addressed in this part of the workshop were:

**Development project proposal(s) – possible short presentation on options**

**Aims and objectives for project(s)**

**Developing the detail of proposal(s)**

**Identification of partners to be part of any initiative**

BirdLife/AEWA presentation on site based conservation initiatives

126. Mr. Perry (BirdLife International) explained that he was making the presentation on behalf of Wetlands International but had been involved in the project described, which concerned a climate-resilient site network in the African Eurasian flyway and was scheduled to run from 2015 to 2019. It had been allocated a grant of €3.2 million from IKI (the German International Climate Initiative) and a further €63,000 had been raised in co-funding. Mr. Perry stressed the importance of having the endorsement of the national authorities in the countries where the project was carried out. Mr. Perry's presentation can be found on the meeting webpage on the CMS website. The aims of the project were to assess the vulnerability of the species, to integrate waterbird conservation into other relevant policies, to restore wetlands for and with local communities and to inform policy development. The initial focus was on the Inner Niger Delta of Mali and Lake Abijatta Shalla in Ethiopia. The Critical Site Network (CSN) Tool, originally a product of the Wings over Wetlands project funded through GEF, would be enhanced.

127. Ms. Mikander described some developments in the features on the CSN Tool particularly those related to "lookalike" species, especially where one was protected and another hunted. Wetlands International had invested considerable time and money in drafting the project, engaging a consultant and undertaking preparatory site visits.

128. The co-funding had been provided by the partners, and the project was coordinated through a steering committee, which met twice a year. The next assessment of data was due in 2018 and the meeting was invited to suggest ways of applying the project more widely.

129. Mr. Pearce-Higgins said that a study on the effects of climate change on SPAs done on behalf of the Defra in the UK had posed challenges in the way that uncertainties could be presented.

130. The Chair noted that a recurrent theme had been uncertainty and this posed a presentational problem. Uncertainty had to be presented in a way that did not undermine the overall conservation case being articulated.

131. Mr. Simmonds asked how this model could be applied to marine species, noted that the amount of co-funding constituted a very small percentage of the overall budget and suggested that there was a role for the Secretariat in coordinating project proposals.

132. The Chair said that he would also welcome strategic support from UN Environment and recognized that the application process would be time-consuming. He was however sure that grant money would be directed towards good ideas that focussed on quantifying the impact of climate change and on the practicalities of mitigating the impact of climate change in particular.

133. Mr. Perry referred to the Climate Action Plan for Latin America and the Caribbean, which involved 12 countries and was supported by the [MacArthur Foundation](#). The potential impact of climate change was being mapped for 3,801 species at 1,139 IBAs and it was being projected that the range of species would decrease by 44 per cent. Among the worst affected were 72 globally threatened species, 190 IBAs would have high rates of species turnover and 84 per cent of IBAs had no or inadequate protection. There were more losers than winners both in terms of species and countries. Mr Perry hoped that a similar exercise could be done in Africa.

## Sakhile Koketso (CBD) Presentation on the work of CBD on Climate Change

134. Climate change was a crosscutting issue under CBD and was covered by the Strategic Plan for Biodiversity (SPBD) 2011-2020. CBD was seeking to: identify vulnerable ecosystems, and components of biodiversity; integrate climate change concerns into National Biodiversity Strategies and Action Plans (NBSAPs); mitigate and reduce impacts and monitor the impacts of climate change on biodiversity.

135. Progress under the CBD climate change programme was reported in the 5<sup>th</sup> National Reports, but few countries had set their own targets for Target 10 (by 2015, the multiple anthropogenic pressures on coral reefs, and other vulnerable ecosystems impacted by climate change or ocean acidification are minimized, so as to maintain their integrity and functioning). Under UNFCCC, countries had to develop National Adaptation Programmes of Action (NAPA) and National Adaptation Plans (NAPs), but of 90 countries that had reported, only Japan, South Africa and Uganda had been specific in setting out what they were doing to monitor impacts.

136. Three publications in the CBD Technical Series were relevant: No. 84 [Update on Climate Geoengineering in Relation to the Convention on Biological Diversity: Potential Impacts and Regulatory Framework](#); No. 85 [Synthesis Report on Experiences with Ecosystem-Based Approaches to Climate Change Adaptation and Disaster Risk management](#); and No. 86 [Managing Ecosystems in the Context of Climate Change Mitigation: A review of current knowledge and recommendations to support ecosystem-based mitigation actions that look beyond terrestrial forests](#).

137. COP13 had adopted a decision welcoming the Paris Climate Agreement and calling for cooperation with UNFCCC and UNCCD to develop guidelines on ecosystem-based adaptation. Existing linkages between CMS and CBD climate change programmes should be enhanced and consideration given to how best to implement them.

138. Noting that both CMS and CBD depended on data provided by their Parties, the Chair asked whether the requests for information were coordinated.

139. Mr. Simmonds sought clarification of the meaning of the term “biodiversity-related livelihoods” as used by CBD. Ms. Koketso explained that this applied to people depending on non-timber forest products, and those with no alternative source of livelihood.

140. The Chair pointed out that the Millennium Ecosystem Assessment showed that everyone was dependent to some degree on conservation. In Western Europe, more people died as a result of poor air quality than did in aviation accidents, but being less dramatic, air quality did not attract the same degree of attention.

141. Mr. Barbieri asked whether the CBD Secretariat was taking steps to integrate climate change mitigation in the NBSAPs. Ms. Koketso explained that under the CBD climate change programme, further steps were being taken to help integrate climate change into NBSAPs. CBD was working with UNFCCC on training workshops for least developed countries. After the courses, a marked increase in references to climate change had been noticed in NBSAPs. The workshops were being continued and extended to further countries. Mr. Barbieri said that CMS would be interested in contributing to the workshops with material related to migratory species. Ms. Koketso replied that there was also scope in developing the voluntary guidelines by including migratory species. All biodiversity-related MEAs were involved in developing best practice for designing and implementing Ecosystem-based Adaptation (Borja Heredia of the CMS Avian Species Team was on the Steering Committee).

142. Ms. Koketso’s presentation can be found on the meeting webpage on the CMS website.

143. The Chair said that having heard the presentations, it seemed that there was a solid basis for a potential bid for significant funding in the making. He asked the meeting to consider what projects should be undertaken; one early candidate was an update of the review of the impacts of climate change on migratory species, especially as it was now ten years since the original review was undertaken.

144. Mr. Pearce-Higgins said that there was a need for more assessments of the vulnerability of Appendix I species. The barriers to adaptation had to be addressed and lists made of what mitigation measures were possible, including case studies and examples of good practice.

145. Ms. Boehm (ZSL) said that it was important to have a sound evidence base, so that policy-makers could be persuaded of the urgent need for action. The ZSL had some residual funds from studies on sedentary species which could be used to redraft the concept note to revise the vulnerability assessment of migratory ones.

146. Mr. Simmonds said that the presentational and communications project should aim at politicians and their civil servant advisers. One case to examine was the North-East Atlantic where changes in various biota were evident. A wide range of taxa should be considered; birds were comparatively well covered in CMS, so examples should include bats, sharks, cetaceans and turtles, many covered by CMS instruments.

147. Ms. Frisch-Nwakanma (IOSEA MOU) said that there was a project in the Indian Ocean region concerning Loggerheads Turtles (*Caretta caretta*), part of which involved standardizing climate change indicators and setting temperature thresholds. It was possible that other CMS instruments had projects at a similar stage of development.

148. Mr. Pearce-Higgins agreed that communication was a key element of the work on climate change. Looking at the POW, he saw one area with potential, this being the examination of migration routes (a bird atlas for Europe was in the offing). Data from various studies, including those using new tracking equipment could be collated to determine where the key sites were.

149. The Chair agreed that an atlas or similar publication would be a good promotional tool. He recalled the enthusiastic reception of the excellent, award-winning book "Survival – Saving Endangered Migratory Species" written by CMS Ambassador Stanley Johnson and the Secretariat's consultant editor, Robert Vagg.

150. Mr. Barbieri mentioned linkages to other CMS initiatives on networks and energy, and critical sites and species with particular connectivity needs. Sensitivity mapping of key sites would help the planning of energy developments and other infrastructure.

151. The Chair identified six potential project areas and sought volunteers to serve on the groups dealing with them:

- Review of the CMS Appendices vis à vis climate change - James Pearce-Higgins and Fani Lamprianidou
- Key Species (and CMS instruments) – Heidrun Frisch-Nwakanma, Mark Simmonds and Andrea Pauly
- Ecosystems (e.g. NE Atlantic) - Heidrun Frisch-Nwakanma, Mark Simmonds and Sakhile Koketso
- Communication – techniques and messages – Mark Simmonds, Aradhna Goury, Melissa Lewis and Florian Keil (CMS/AEWA Joint Communications Unit)
- Capacity for monitoring – desk review or on the ground – regional and then country by country - Edward Perry, Wisdom Dlamini and Peter Puchala
- Critical Sites and Sensitive Zones - Peter Puchala and Marco Barbieri

152. A working group session was convened, during which the above groups met in parallel and developed outlines of project concepts according to a pro forma proposed by the Secretariat. The groups then reported in plenary on their work.

### CMS Appendices

153. Mr. Pearce-Higgins (BTO) reported good progress for the group dealing with the review of the CMS Appendices , saying that the pro forma had been completed and the project had been named Adaptation Information for Migratory Species(AIMS).

### Communications

154. Mr. Simmonds said that he and Ms. Lewis had met Florian Keil, the Coordinator of the Joint CMS/AEWA Communications Team. Mr. Keil would join the workshop later and the pro forma would be completed. Mr. Keil described an inclusive campaign aiming at involving a wide range of partners as possible and contributing to the climate change debate using species as a medium. The campaign would be ambitious and innovative, building on a two-page concept note to which a “wish list” could be added. The budget might include hiring a professional public relations company. The Joint Communications Team of CMS and AEWA could develop some thematic pages for the websites and coordinate the production of a dedicated publication as a vehicle for collecting material on the effects of climate change on species. A series of factsheets could also be prepared. Preferably the material would be produced in all six UN languages, with the target audience being the general public, who were not necessarily convinced of the need for action. It would be important to bridge the gap between scientists and laypeople. It would also be desirable to work with other MEAs to present a joint front.

### Species and Ecosystems

155. Mr. Simmonds said that his group had reviewed both the ecosystems and candidate species, and the only one of the latter being questioned was the Common Loon. After a further session of deliberation, Mr. Simmonds proposed a digest of key species and the impacts of climate change on them. A pro forma would be prepared as a guide for identified authors to produce articles. The digest would also include photographs and graphics. Factsheets and other information material would be prepared for various media. A rough estimate of the likely cost was US\$10,000, given that most of the work could be done in-house. The key habitats included mangroves, the African Savannah, the Central Asian Steppe and the Congo Basin Forest, while the key species highlighted in the workshop were the Common Loon, the Narwhal, the African Penguin (*Spheniscus demersus*), the Snow Leopard, the African Wild Dog, the Saiga Antelope, the Monarch Butterfly and the Blue Whale (*Balaenoptera musculus*). Mr Keil pointed out that there was a huge social media response to any postings on the Snow Leopard.

### Capacity

156. Mr. Perry explained that the overall objective was to monitor and report on the effects of climate change on migratory species and their habitats. A gap analysis would be conducted identifying where knowledge was deficient regarding species and geographic locations, to target species and areas requiring further examination. Where capacity was insufficient, remedial action could be taken, such as training to maximize the use of existing tools and systems. Account would be taken of the existing burden of reporting on Parties, and the need for streamlining was recognized. Many data were not being fully used. One of the outcomes would be better understanding of impacts to inform policy and planning.

## Critical Sites and Sensitive Zones

157. Mr. Barbieri said that the group dealing with critical sites and sensitive zones had made as much progress as it could, having collated a number of ideas for activities, including developing the concept of network schemes for specific species and regions.

158. After the group presentations, potential sources of funding were discussed:

159. Mr. Barbieri gave a presentation on the IKI, which had been launched by the German Government in 2008. It was administered through the Federal Ministry for the Environment, Nature Protection, Building and Nuclear Safety (BMUB). Projects concerning climate and biodiversity run by German, foreign and international agencies including UN bodies were eligible for support.

160. Mr. Barbieri described the areas of activity which could be funded under IKI, of which the renewable energy and ecosystem adaption components of the mitigation section as well as the broadly defined "biodiversity" division were of greatest relevance to CMS. He also outlined the application process, which included an annual call for project proposals, which usually took place in the first half of the year and required a user-friendly template to be completed in English. Short-listed projects were contacted and invited to submit a formal funding request.

161. Programme of Work (POW) was typically suggesting projects to the extent of hundreds of thousands of dollars.

162. Mr. Barbieri's presentation can be found on the meeting webpage on the CMS website.

163. Laura Cerasi (CMS Secretariat) said that efforts should be made to influence the priorities of the IKI programme, one of which was the implementation of CBD and the Aichi Targets. She suggested that a letter signed by Mr Chambers and Mr Galbraith be sent to the BMUB calling for IKI to be extended to include migratory species. A sympathetic response could be expected given the role of the German Government as host and depositary of CMS. It was agreed that such a letter should be sent.

164. Ms Cerasi also said that a project portfolio was being built up to implement the UNEP POW, which included activities of UNEP-administered MEAs such as CMS. Further possibilities, all of which would be considered, included the EU LIFE programme, the Global Environment Facility, voluntary contributions from Parties, funding institutes and private sector donors.

## **9. Session 6 - Conclusions and mapping out a timeline for action**

### Identification of a timeline leading up to the CMS COP

165. Mr. Barbieri (CMS Secretariat) said that an item on climate change had been included on the COP agenda. It was not clear yet whether there would be any new policies to present in a draft resolution. He reminded the meeting of the process of consolidating existing Resolutions, for which the Secretariat was consulting Parties to ensure that nothing of importance was being lost. The mechanics of adopting the consolidated text would not be complicated, unless new provisions were proposed.

166. The Executive Secretary said that the consolidation process was based on a clear mandate from the Parties and had been carried out thoroughly. Parties were of course still able to make changes to the wording of provisions.

167. Ms. Frisch-Nwakanma (IOSEA MOU) said that from her experience of doing a similar exercise for ASCOBANS, it would be advisable to differentiate clearly between existing wording and any amended provisions.

168. Mr. Simmonds (HSI) welcomed the work done on consolidation but noted that reference to the IWC had been lost, which would be regrettable given that the IWC had only recently taken greater interest in climate change and ecosystems.

169. Ms. Lewis (AEWA Technical Committee) commented that the preamble of the consolidated text was rather long, and the list of cross-references might be better placed in an annex. She also proposed adding an invitation to other CMS instruments to adopt the same definition of favourable conservation status as the parent convention.

170. Ms. Koketso (CBD) noting the reluctance of some CBD Parties to discuss climate change, asked whether the same problem arose at CMS. The Chair said that CMS Parties have proved to be quite willing to address climate change but that resources to take action were clearly limited.

#### Identification of a timeline for developing project(s)

171. The Chair said that the two-page project summaries should be completed by the end of April. He asked the Secretariat to provide the deadlines of UNEP grant programmes hoping that the timing would be consistent with the run-up to COP.

#### Follow-up action required from the workshop

172. The Chair proposed holding a telephone conference around late April which was a month in advance of the 150-day submission deadline (24 May) for the COP. The COP was an important stage upon which to present the Working Group's ideas to the Parties and a wider global audience. The teleconference could also allow an opportunity to comment on the consolidated text of the resolutions. The Secretariat was requested to circulate a reminder in advance of the teleconference.

173. Mr. Simmonds asked about the possibility of holding a side event at COP, with either a Party or an NGO as the lead partner. Such an event would provide a platform at which to launch new initiatives or new materials.

174. In summary, the Chair said that the meeting had agreed that climate change continued to be a major threat to migratory species and was therefore an appropriate issue with which the Convention should concern itself in future. Some regions (e.g. the Arctic) were undergoing rapid changes and the rate of change was also a concern. It was agreed that climate change was also a compounding factor, making other existing factors worse. It was part of a complicated, interrelated cocktail of threats, affecting ecosystems and human activities. There was wide consensus that communication was vital and the audiences to address were policy-makers and the public.

175. The Working Group needed to designate between ten and twelve animals as flagship species to illustrate the effects of climate change. These species discussed were: the Narwhal, the Common Loon, the common Cuckoo, the African Penguin, the Loggerhead Turtle, the African Wild Dog, the Monarch Butterfly, Snow Leopard, the Caribou, the Saiga Antelope, the Blue Whale and the Whale Shark. These species provided a good coverage of geographic range and vulnerability to various threats. Focus should also be placed on fragile ecosystems such as the Southern African Savannah, coral reefs, the North-east Atlantic (focusing on krill), the Central Asian Steppe, the Congo Basin Forest and mangroves. Wherever possible, CMS should seek to cooperate with other MEAs in promoting common concerns.

176. There were examples of measures to limit the impact of climate change that were proving effective, such as Special Protection Areas under the EU Birds Directive, the Socio Bosque programme in Ecuador, the management of geese in the Russian Federation and monitoring the temperature of the sand at turtle nesting beaches.

177. There was a long list of barriers preventing action, first and foremost was the lack of financial resources. Other inhibiting factors were the lack of capacity; the fact that the benefits of action were not immediately apparent and the threat seemed distant; initiatives not having local community support; the reluctance to change long-standing practices; agencies such as ministries having a “silo” mentality; not having the arguments to convince and persuade and dependence on predictions that lacked certainty.

178. Enquiries should be made to establish whether the IKI and UNEP grant schemes could be used to fund the projects under the six area of activity identified. As the baseline report on climate change and migratory species was now ten years old, updating it should be a high priority.

179. In his summary, the Executive Secretary reiterated what the Chair had said. Of the species proposed, the African Wild Dog would fit in well with the African Carnivore Initiative. The Polar Bear was benefitting from attention from a global forum such as CMS in addition to the regional efforts of the Range States. The Snow Leopard was an iconic species, but of limited economic value given that the inaccessibility of its habitat meant that ecotourism was unlikely to be viable on a large scale.

180. The COP was an opportunity for the Parties to give the Secretariat a robust mandate, to increase fund-raising to implement the POW for climate change and to lobby development banks and for the Joint Communications Team to promote the Convention’s activities mandate. The CMS would seek to increase its contribution to the Biodiversity Liaison Group’s work on climate change and work with other MEAs.

181. Mr. Barbieri said that consideration was being given to setting up a secure area on the CMS website where documents could be shared by members of the Working Group. The papers would not be public. A link would be circulated in due course.

## **10. Closure of the workshop**

182. The Chair sought and received confirmation from the participants that the agenda had been more than adequately covered. Mr Pearce-Higgins (BTO) said that while climate change could be a depressing subject, he was confident that if progress was made on implementing the Programme of Work, there would be positive news to report to COP14 on the measures that Parties could take; this would however require resources.

183. After the customary expression of thanks to all those involved in the planning and execution of the meeting, the Chair closed proceedings at 16:20.

## ANNEX I – List of Participants

### Chair

**Mr. Colin Galbraith**

CMS COP-Appointed Scientific Councillor for Climate Change and Chair of the Working Group

### Government Experts

**Ms. Gina Giselle Cuza Jones**

National Focal Point Costa Rica  
Costa Rica

**Mr. Wisdom Dlamini**

Swaziland National Trust Commission  
Swaziland

**Ms. Aradhna Goury**

Ministry of Agro Industry and Food Security  
Mauritius

**Mr. Peter Puchala**

State Nature Conservancy of Slovakia  
Slovakia

### Institutions and Organisations

**Ms. Monika Boehm**

Zoological Society of London (ZSL)

**Ms. Sakhile Koketso**

Convention on Biological Diversity Secretariat (CBD)

**Ms. Melissa Lewis**

AEWA Technical Committee

**Mr. James Pearce-Higgins**

British Trust for Ornithology (BTO)

**Mr. Edward Perry**

BirdLife International

**Mr. Mark Peter Simmonds**

Humane Society International (HSI)

### CMS Family Secretariats

**Mr. Marco Barbieri**

CMS Scientific Adviser

**Ms. Laura Cerasi**

CMS Associate Programme Officer, Fundraising and Partnerships



**Mr. Bradnee Chambers**  
CMS Executive Secretary

**Ms. Heidrun Frisch-Nwakanma**  
CMS Associate Programme Officer, Aquatic Species, IOSEA MOU

**Mr. Suren Gazaryan**  
EUROBATS Scientific Officer

**Mr. Florian Keil**  
Joint CMS and AEWA, Communication, Information Management and Outreach

**Ms. Clara Antonia Klöcker**  
CMS Intern

**Ms. Fani Lampryanidou**  
CMS Intern

**Ms. Nina Mikander**  
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