



Memorandum of Understanding  
on the Conservation of  
Migratory Birds of Prey in  
Africa and Eurasia

Distribution: General

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**REPORT OF THE FOURTH MEETING  
OF THE TECHNICAL ADVISORY GROUP TO THE RAPTORS MOU  
Final Draft**

**13-15 December 2021**

**Online digital meeting**

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## Acronyms and Abbreviations

AEWA	African-Eurasian Migratory Waterbird Agreement
BMP	Biodiversity Management Plan
CAF	Central Asian Flyway
CBD	Convention on Biological Diversity
CITES	Convention on International Trade in Endangered Species
CMS	Convention on Migratory Species
CSAR	Conservation Status Assessment Report
CU	Coordinating Unit of Raptors MOU
EAD	Environment Agency – Abu Dhabi
EU	European Union
EWT	Endangered Wildlife Trust
GRIN	Global Raptor Information Network
IBA	Important Bird and Biodiversity Area
ICARUS	International Cooperation for Animal Research Using Space
IKB	Illegal Killing of Birds
ISPRA	Italian Institute for Environmental Protection and Research
IUCN	International Union for the Conservation of nature
MBZRCF	Mohammed Bin Zayed Raptor Conservation Fund
MIKT	Intergovernmental Task Force on Illegal Killing, Taking and Trade of Migratory Birds in the Mediterranean
MOP	Meeting of Parties
MOS	Meeting of Signatories
MOU	Memorandum of Understanding
MsAP	Multi-species Action Plan
NCW	National Center for Wildlife, Saudi Arabia
NGO	Non-governmental Organization
NSAID	Non-steroidal Anti-inflammatory Drug
NVTF	National Vulture Task Force, South Africa
RSPB	Royal Society for the Protection of Birds
SakerGAP	Saker Global Action Plan
SAVE	Saving Asia's Vultures from Extinction
STF	Saker Falcon Task Force
TAG	Technical Advisory Group
UK	United Kingdom of Great Britain and Northern Ireland
UNEP	United Nations Environment Programme
USAID	United States Agency for International Development
VSZ	Vulture Safe Zone
WP	Work Plan

## Executive Summary

The Technical Advisory Group (TAG) to the Raptors MOU met virtually over 13-15 December 2021 to discuss key conservation priorities for African – Eurasian birds of prey.

- TAG encouraged **synergies with other CMS initiatives** particularly in relation to lead poisoning, electrocution, Central Asian Flyway, and Illegal Killing of Birds.
- Exciting updates **from TAG members** were heard:
  - Mátyás Prommer reported on the limited genetic flow between the eastern and western populations of the Saker Falcon *Falco cherrug*.
  - Mohammed Shobrak reported on the new hunting legislation and enforcement structure in Saudi Arabia.
  - Nyambayar Batbayar reported on a number of conservation initiatives ongoing in Mongolia including on the Golden Eagle *Aquila chrysaetos*, Saker Falcon and Pallas's Fish-eagle *Haliaeetus eucryphia*.
  - Munir Virani updated the TAG on the poisoning prevention programme for vultures in Kenya.
  - Suresh Kumar gave an update on work ongoing in India including on the Amur Falcon *Falco amurensis*, Saker Falcon, National Vulture Action Plan and the Central Asian Flyway.
- The TAG celebrated progress on the delivery of the **flagship projects in the SakerGAP** and welcomed the continuing work of the Saker Falcon Task Force including the two discussion groups on Electrocution and Adaptive Management Framework for sustainable use.
- The TAG welcomed and congratulated the **progress on implementation of the Vulture MsAP** following regional updates from Africa, Europe, and Asia.
- The TAG gathered experiences from Signatories regarding the important development of **National Raptor Conservation Strategic Guidelines** in Norway and Switzerland, a National Vulture Strategy in South Africa, and the AEWA monitoring and reporting processes.
- The TAG endorsed **amendments to the MOU text, the species list (Annex 1), sites list (Annex 3 Table 3) and the Action Plan (Annex 3)** following several rounds of consultations over the past year. One additional species, the Yellow-billed-Kite *Milvus aegyptius*, was added to the proposed amendment of the Raptors MOU Annex 1 following a taxonomic split from the Black Kite *Milvus migrans* and the recognition of its migratory status. A significantly expanded list of important sites for raptors was endorsed by TAG to be proposed for adoption by Signatories at MOS3.
- The TAG endorsed the new national and cooperating partner **report forms** for reporting to MOS3.
- **Two new tools for analysis** were decided upon: the site network analysis, and the concept for a new conservation status assessment report for raptors.
- Consideration of **horizon scanning, and emerging issues** focused on the forthcoming Eurasian-African bird migration atlas, Reintroductions as a tool for conservation of migratory raptors, and human-raptor conflicts.
- Finally, the TAG discussed the content of an **updated Work Plan for the period MOS3-MOS4**, and the process for consideration by to MOS3.

## 1. Welcome and Introductions

1. The Chair, Prof. Des Thompson (TAG member for Europe), warmly welcomed all participants to The CMS Raptors MOU TAG 4 meeting. He expressed regret that the online format of the meeting reduced possibilities for informal engagement and hoped face-to-face meetings would resume in 2022.
2. Mr. Lyle Glowka (Executive Coordinator, CMS Office - Abu Dhabi) thanked all the TAG members for their participation, noting that the current membership of the TAG had been together for over six years since late 2015. Staffing of the Coordinating Unit and CMS support team had changed since the previous TAG meeting in 2018.
3. Mr. Glowka indicated that the Coordinating Unit had made good progress on the delivery of the Raptors MOU work programme since the previous meeting despite the staff changes. The deliberations and recommendations of the current meeting would provide critical input to the Meeting of the Signatories to the MOU that was anticipated to take place in October 2022. Recommendations would help advance the implementation of the MOU, and revision of the Action Plan would be a critically important development. He thanked Dr. Salim Javed, Acting Director - Terrestrial Biodiversity, Environment Agency – Abu Dhabi (EAD), for EAD's relocating the Coordinating Unit to new offices in Abu Dhabi, and introduced Dr. Umberto Gallo-Orsi, Head of the Coordinating Unit of the Raptors MOU, and Ms. Sofi Hinchliffe, the Office's Associate Programme Management Officer who was supporting the Coordinating Unit.
4. Ms. Tine Lindberg-Roncari (CMS Secretariat) outlined the logistical arrangements for the meeting.
5. Dr. Gallo-Orsi (Coordinating Unit) welcomed all TAG members, Signatories, observers and invited experts to the meeting. He especially looked forward to finalizing documents in the meeting that would provide important contributions to the Meeting of Signatories that would hopefully take place in 2022.
6. The Chair paid tribute to the former head of the Raptors MOU Coordinating Unit, Mr. Nick Williams, and former TAG member Dr. Jean-Marc Thiollay (France), two dear colleagues who had passed away in 2021.
7. Mr. Williams had successfully led the Raptors MOU between 2011 and 2020, during which time he had established and managed the TAG, coordinated two Meetings of the Signatories, initiated, and coordinated the Saker Falcon Task Force, and coordinated the development of and co-authored the Vultures MsAP. The number of Signatories and Cooperating Partners to the MOU had more than doubled under his tenure. His determination, commitment and enduring dedication to raptor conservation had been remarkable.
8. The Vice-Chair, Mr. André Botha (TAG member for Africa) reinforced the tribute of the Chair and stressed the role of Mr. Williams as a driving force and guiding light for the Raptors MOU. He also fondly recalled Mr. Williams's prowess playing football at a meeting in Extremadura, and cricket on the streets of Mumbai.
9. Dr. Jean-Marc Thiollay died in November 2021 and the Chair paid tribute to a life spent studying raptors from early childhood. In a distinguished research and conservation career, Dr. Thiollay had observed 9,600 bird species, most recently, according to his widow, Harpy Eagle in Central

America, and many species in the Nicobar Islands. His experience of vulture conservation in Africa was vital in the drafting of the Vultures MsAP. His many friends and colleagues would miss his warmth, kindness, and attention to detail.

10. The Vice-Chair attested to Dr. Thiollay's utter dedication and drive in the study of raptors and considered him to be an icon with unique experience and influence in the field of raptor conservation.
11. Dr. Munir Virani (Expert TAG member) recalled fieldwork with Dr. Thiollay in Kenya in 2008 and stressed the importance of his historical data when recording population declines of raptors in Africa.
12. One minute's silence was observed by the meeting in tribute to Mr. Williams and Dr. Thiollay.

## 2. Adoption of the Agenda

13. Ms. Hinchliffe (Coordinating Unit) introduced the Provisional Agenda and Provisional Annotated Agenda (documents [UNEP/CMS/Raptors/TAG4/Doc.2.1](#) and [UNEP/CMS/Raptors/TAG4/Doc.2.2/Rev. 1](#)) and the TAG Terms of Reference (document [UNEP/CMS/Raptors/TAG4/Inf 2.](#)). She asked the meeting for suggested amendments, or additional topics for discussion under Agenda item 7, Any other business.
14. There being no suggestions for amendment to these documents, the agenda and meeting schedule were adopted.

## 3. Updates since the Third Meeting of TAG

### 3.1 Review of Actions from the Third Meeting of TAG

15. Ms. Hinchliffe gave a presentation based on document [UNEP/CMS/Raptors/TAG4/Doc.3.1/Rev. 1](#) *Review of actions from TAG3*.
16. TAG3 had taken place in Switzerland in 2018, and of the 26 Actions agreed at the meeting, 13 had been completed, seven were ongoing, five were due for consideration by TAG4 and one had been dropped.
17. The proposal to consider enlarging the geographic scope of the MOU had been dropped due to lack of capacity in the Coordinating Unit.
18. TAG4 would be considering the following Actions:
  - Action TAG3 - 5, Vulture Safe Zones, under Agenda item 6.3;
  - Action TAG3 - 11, Sites in Switzerland, under Agenda item 4;
  - Action TAG3 - 18, Conflict resolution, under Agenda item 6.7;
  - Actions TAG3 - 24 and 25, Guidance on, and examples of National Raptor Conservation Strategies, under Agenda item 4.

19. The seven ongoing actions were as follows:

- Action TAG3 - 3, Letters of support: three letters had been issued and efforts continued;
- Action TAG3 - 6, Guide to Guidance, was covered by the section of the website under threats, but remained an ongoing action;
- Action TAG3 - 13, Black Harrier *Circus maurus*: Letters had been written to both the South African and Namibian governments. South Africa preferred to concentrate efforts on vultures for now;
- Action TAG3 - 15, Identification of priority species, would be addressed in the new Conservation Status Assessment Report that would be outlined by BirdLife International under Agenda item 6.5;
- Actions TAG3 - 20 and 22 were related to communications and while many TAG members had contributed, there was scope for further input;
- Action TAG3 - 21, Encourage female nominations, would be taken forward in the present meeting and at the MOS in 2022.

20. The Chair congratulated the TAG members and Coordinating Unit on the progress made, encouraged them to complete the ongoing actions, and the meeting took note of the update of the review of actions.

### 3.2 Report from the Coordinating Unit

21. Dr. Gallo-Orsi gave a presentation based on document [UNEP/CMS/Raptors/TAG4/Doc.3.2 Report from the Coordinating Unit](#).
22. Despite a complete turnover of staff, the Coordinating Unit had continued to support Signatories and the TAG as well as undertaking species-specific activities.
23. There were now 61 Signatories to the MOU, with the most recent additions being Jordan (2019) and Ethiopia (2020).
24. Voluntary financial and in-kind contributions to activities had been received since the last TAG from the governments of Hungary, Slovak Republic, and Sweden, and had been announced for 2021 from the Netherlands, Norway, and the United Kingdom. EAD continues to make significant investments in hosting the CMS Office – Abu Dhabi and the Coordinating Unit on behalf of the Government of the United Arab Emirates.
25. The Coordinating Unit had engaged with BirdLife International and a consultant to provide technical support, and to advance the TAG Work Plan in preparation for TAG4, and MOS3 in the third quarter of 2022. Activities undertaken had included update and amendment of the MOU and its Action Plan, updating the species list, preparation of a conservation status assessment report, updating the list of sites important for raptors, and developing and testing reporting forms for Signatories and cooperating partners.
26. Coordination of the Saker Falcon Task Force (STF) and implementation of the Saker Falcon Global Action Plan (SakerGAP) would be reported separately, as would support for the implementation of the African-Eurasian Vultures Multi-species Action Plan (Vultures MsAP).

27. Following the identification of Steppe Eagle *Aquila nipalensis* as a priority species by TAG3, efforts had been made to secure funding for development of a Single Species Action Plan, but without success.
28. The Fourth Joint Bern Convention - CMS Meeting on Illegal Killing, Taking and Trade of Wild Birds (MIKT4) had taken place in June 2021. An EU good practice document on Illegal Killing of Birds was also being developed, and a roadmap for addressing the Illegal Killing of Birds in the Arabian Peninsula, Iraq and Iran had been agreed following a workshop in Jordan in October 2021.
29. Additional activities undertaken had included contributing to the streamlining of the workplan of the CMS Energy Task Force and the Terms of Reference of the Electrocution Discussion Group of the Saker Task Force. Contributions had also been made to the Road Map for the Central Asian Flyway.
30. Activities planned for 2022 included planning, organizing, and hosting the Third Meeting of the Signatories to the MOU (MOS3), possibly in October in Abu Dhabi. It was also planned to convene a meeting of experts and complete the International Single Species Action Plan for the Sooty Falcon *Falco concolor*.
31. The TAG took note of the progress detailed in document UNEP/CMS/Raptors/TAG4/Doc.3.2. 'Report from the Coordination Unit'.

### 3.3 Report from the CMS Secretariat

32. Dr. Iván Ramírez (CMS Secretariat) gave a detailed presentation titled "Report of the CMS Secretariat" based on document [UNEP/CMS/Raptors/TAG4/Doc.3.3](#).
33. The presentation was a review of key overarching CMS and avian-related developments and achievements since TAG3, with a focus on migratory raptors. Details were provided of how the TAG could contribute to the implementation of a number of resolutions and decisions through specific guidance and inputs, and the CMS Secretariat welcomed engagement from TAG members and would work to ensure better synergies.
34. A highly topical issue was Wildlife Disease and Migratory Species under Resolution 12.6. The CMS Secretariat had contributed to UNEP's efforts in joining the 2020 One Health Initiative and had reactivated the Scientific Task Force on Avian Influenza. Terms of Reference had also been developed for a CMS Working Group on Migratory Species and Health, and for a Review of Migration and Wildlife Disease Dynamics and the Health of Migratory Species.
35. Climate Change was another topical issue, which had been addressed by Resolution 12.21 and Decisions 13.126 – 13.128. Climate-induced range shifts made it necessary to consider actions beyond the historic ranges of species, and the CMS Scientific Council Sessional Committee had prepared document [UNEP/CMS/ScC-SC5/Doc.6.4.5](#) *Climate Change and Migratory Species* in relation to this.
36. Resolution 12.26 examined ways of addressing connectivity in the conservation of migratory species, and CMS had supported CBD by including indicators for ecological connectivity and migratory species in the post-2020 global biodiversity framework. CMS had also submitted a



request for an assessment on connectivity for the second work programme of IPBES, up to 2030, and at the fifth meeting of the Sessional Committee of the Scientific Council, adopted Terms of Reference for the CMS Scientific Council Working Group on Ecological Connectivity.

37. Many other CMS and avian-related developments and achievements since TAG3 included:

- Application of Article III of the Convention regarding international trade in CMS Appendix I-listed Species;
- A request for an in-depth review of the Conservation Status of Migratory Species;
- Actions relating to the prevention of poisoning of migratory birds and the prevention of illegal killing, taking and trade of migratory birds;
- Actions in relation to renewable energy and migratory species and power lines and migratory birds;
- Activities of the Energy Task Force;
- Actions in relation to flyways, including support for the implementation of the Flyways Programme of Work in conjunction with the Flyways Working Group, and collaboration with the Government of India in developing the institutional framework for the Central Asian Flyway (CAF).

38. Prof. Mohammed Shobrak (Expert TAG member) asked whether, in relation to cooperation with CITES, both partners were using the same system of taxonomy and nomenclature. He added that the development of an institutional framework for the CAF was very welcome.

39. Dr. Ramírez addressed this question by pointing out that these differences in taxonomy were well understood and were taken into account when considering the Appendices of the two Conventions. He added that CMS was grateful for the support of the Indian government with the CAF and was hoping that all Range States would complete the questionnaires that they had been sent.

40. The Vice-Chair, Mr. Botha, referred to a letter sent to the government of Guinea Bissau following a mass poisoning incident of vultures in 2020, and asked if there was the possibility of any follow-up. He was planning to travel to the country in 2022 and was hoping for a response from the government.

41. Dr. Gallo-Orsi said that there had been an acknowledgement, but no official reply to the letter to the government of Guinea Bissau. He added that the Coordinating Unit would be glad to support the mission to Guinea Bissau and would be prepared to write a follow-up letter in consultation with the CMS Secretariat in Bonn.

42. Mr. Botha continued with a question related to the Task Force on Lead and asked about the current status of the Task Force, and the responsibilities of TAG members with regard to the Task Force.

43. Dr. Ramírez replied that there was now a new Task Force that superseded the previous Task Force relating to lead called the Intergovernmental Task Force on Phasing Out the Use of Lead Ammunition and Lead Fishing Weights. It was an inter-governmental process that reported to the COP, and its Terms of Reference had been adopted by the CMS Standing Committee in September

2021. The membership of the Task Force would be recruited in 2022, and it was anticipated that it would include members of the Preventing Poisoning Working Group.

44. The Vice-Chair then welcomed the activities of the Energy Task Force but expressed the need to consider alternative technologies that were more bird-friendly. Nick Williams, the former head of the Coordinating Unit, had felt strongly about this, and it was an issue that had not received sufficient attention, and that needed putting back on relevant agendas.
45. Dr. Ramírez fully agreed with the need for more wildlife-friendly devices for renewable energy generation. There was a requirement to explore possibilities and publicize this issue.
46. Finally, Mr. Botha had been glad to hear about a proposal for financial support for the Vulture MsAP, even though it had not been successful, but he expressed disappointment that the Vultures Working Group of the Raptors MOU had not been consulted during preparation of the proposal.
47. Dr. Ramírez agreed that there was a need for better cooperation. Since his arrival in Bonn there had been regular meetings with the Raptors MOU Coordinating Unit.
48. Dr. Tilman Schneider (CMS Secretariat) explained that he had submitted the application at short notice after seeing an opportunity under the leadership of the terrestrial species team to address work on a thematic call for preventing pandemics, mostly relating to West Africa. He recalled internal discussion with colleagues in charge of avian work, but he had not had time to consult with vulture experts and he apologised for this.
49. The TAG took note of the progress detailed in document UNEP/CMS/Raptors/TAG4/Doc.3.3. *'Report of the CMS Secretariat'*.

### 3.4 Updates from TAG members

50. Mr. Mátyás Prommer (TAG member for Europe) updated the TAG on his work on Saker Falcons. He referred to a successful online international Saker Falcon conference earlier in December 2021 that had focussed on the very small European population. More than 100 delegates had participated in the meeting that had been hosted by his institute in the framework of an EU Life project.
51. A recent genetic study suggested that Saker populations in Mongolia, South Siberia, the Altai Mountains, and Europe might be genetically distinct. More work was needed, but it seemed possible that there might be grounds for splitting Saker Falcon into two or more species in future.
52. Mr. Prommer then referred to a new law in Saudi Arabia that made it illegal to trap, keep or hunt with wild-caught Lanner, Saker or Peregrine Falcons. The new law was enforced by the Saudi Arabian Environmental Police and there was every sign that the legislation would be effective.
53. Prof. Shobrak gave a presentation titled "Standards, hunted species, hunting period and hunting bags implemented in the Kingdom of Saudi Arabia for sustainable hunting."

54. According to Brochet *et al.* (2019), an estimated 1,700,000 birds were hunted illegally in Saudi Arabia each year. This was more than half of the total of 3,200,000 estimated for all countries in the Arabian Peninsula, Iraq, and Iran.
55. The presentation provided details of provisions under a law issued in January 2021 by the Ministry of Environment, Water and Agriculture, titled “Executive regulation (bylaw) for hunting of wildlife terrestrial species.” The law contained 10 Articles and was implemented by the National Center for Wildlife.
56. The criteria for determining species that were banned for hunting were those for which hunting was banned under Sharia law, those identified by documented scientific studies, those protected under international and regional Agreements signed and ratified by the Kingdom, and those for which there was a ban under the Ministry of Environment, Nature, and Water.
57. The criteria to determine hunting periods were based on the life cycles of species, and for most species it was determined that the autumn season was most appropriate for hunting.
58. A total of 27 bird species were now included on the hunting list in Saudi Arabia. The criteria for determining hunting bags were based on the IUCN population estimates, for which a 1% harvest rate was deemed sustainable. This level was then divided up between range states, to determine the maximum hunting bag for Saudi Arabia and that number was shared between the licensed hunters, resulting in a bag limit per hunter per species.
59. The new law established the Special Forces for Environmental Security, responsible for enforcement, which it was planned to extend to cover the entire country.
60. Conservation of the Peregrine Falcon *Falco peregrinus pelegrinoides* was being undertaken through the Hadad programme. Release of 33 captive-bred females had so far resulted in the production of 47 chicks from 20 nests.
61. Cooperation had been established with an electricity company to protect migratory Egyptian Vultures *Neophron percnopterus* and Steppe Eagles from risks posed by electricity supply infrastructure.
62. Dr. Vicky Jones (BirdLife International, TAG member) congratulated Prof. Shobrak on the new hunting regulations in Saudi Arabia which represented a huge step forward.
63. Dr. Nyambayar Batbayar (TAG member for Asia) gave a presentation titled “Mongolia update.”
64. A major project remediating thousands of kilometres of electric power lines in Mongolia was continuing, following the signing of an MOU in 2019 between the Mohammed Bin Zayed Raptor Conservation Fund (MBZRCF) and the Ministry of Environment and Tourism in Mongolia. New insulators were being installed on the top and cross arms of power line support poles to prevent the electrocution of birds. To date, 50% of planned installations had taken place, but work had been delayed by Covid-19 restrictions.
65. Further work with the government to develop guidelines for the safe design of medium voltage power lines as a part of new national standards was being supported by the government of Abu Dhabi and MBZRCF.

66. A project was being undertaken on the conservation of Golden Eagle used in falconry in Kazakhstan. This involved breeding population monitoring, registration of captive eagles, a migration and population genetics study, and a recent Kazakh falconers summit in October 2021. An archive of Kazakh falconers and a falconry school were planned, along with further training of biologists.
67. The popularity of falconry with Golden Eagles was considerable in Kazakhstan and over 2,000 people had attended a recent festival, where 116 captive Golden Eagles had been ringed in two days. This popularity meant there was a market for the species, and many people derived income from the capture and sale of eagles. Kazakh partners had established an NGO, the Kazakh Falconry Association, and it was hoped that the project could influence them to work sustainably and ensure the maintenance of the Golden Eagle population.
68. A third project in cooperation between the Wildlife Science and Conservation Center of Mongolia, IUCN Bangladesh, and Linnaeus University, Sweden, involved satellite tracking of Pallas's Fish-eagles with objectives to study their ecology, characterize exposure to pollutants and raise awareness at local and regional scales. A total of five birds had been tagged in Mongolia in 2020-2021, two of which had been electrocuted in China and India, and three of which had wintered in Bangladesh and India.
69. Studies of Raptor migrations involved satellite tracking of 12 species: Pallas's Fish-eagle, Steppe Eagle, Golden Eagle, Short-toed Snake Eagle *Circaetus gallicus*, Black Kite, Saker Falcon, Upland Buzzard *Buteo hemilasius*, Eastern Marsh Harrier *Circus spilonotus*, Hen Harrier *Circus cyaneus*, Cinereous Vulture *Aegypius monachus*, Bearded Vulture *Gypaetus barbatus* and Booted Eagle *Hieraetus pennatus*.
70. Raptor nest monitoring projects were also being undertaken for Cinereous Vulture, Saker Falcon, Golden Eagle, and the raptor community of the southern Gobi, involving 350-400 nesting pairs of 10 species.
71. Dr. Batbayar ended his presentation by stressing the need to involve more young people in fieldwork and analysis. The quality of university teaching in Mongolia did not meet modern requirements, and he was in contact with academics in the US, UK and elsewhere in an effort to improve the situation.
72. Dr. Munir Virani showed a short video clip about the mitigation of electrocution of raptors in Mongolia. Formerly, an estimated 18,000 raptors died from electrocution each year. An MBZRCF project had developed a cost-effective plastic mould, deployment of which may reduce this mortality by up to 98%.
73. Dr. Virani gave a presentation titled "Beacons of hope: Saving Kenya's vultures from poisoning," stressing that Dr. Ralph Buij (Wageningen University, the Netherlands) was a major participant in the work described.
74. The economic cost of livestock lost to Lions *Panthera leo* and other wildlife species was very high in Kenya, and livestock farmers often poisoned wildlife, resulting in secondary poisoning of vultures and other carrion eaters.

75. A poisoning intervention training course in 2016, led by André Botha, had raised awareness, and led to many further such workshops where so far 1,235 individuals had been trained in 85 groups.
76. Nowadays, six Maasai practitioners were working in the field, placating livestock farmers, problem-solving, and acting as eyes and ears on the ground, and being mentored by Dr. Buij. Vulture liaison officers were sent to lead poisoning hotspots (often identified by satellite transmitters) to undertake awareness work and have crucial conversations with farmers.
77. In 2010, mortality of tagged vultures from poisoning had been 32%, but between 2018 and 2020 this had been reduced to about 12%. Survival rates of vultures in Kenya seemed to be improving.
78. Dr. Virani emphasized that the project had been a very big collective effort involving many organisations and individuals. The input of Dr. Buij, and of Mr. Botha and the Endangered Wildlife Trust had been crucial and he thanked them for their mentorship and leadership.
79. Dr. Suresh Kumar (TAG member for Asia) gave a presentation on raptor research in India, starting with his work on the Amur Falcon in Nagaland and adjoining areas of north-east India. His institute had produced two reports titled "*Understanding the Amur Falcon, their stop-over sites in Nagaland and their migratory routes for better conservation planning*", and "*Satellite tracking Amur falcon from their stop-over sites in Manipur to support conservation efforts.*" Fifteen birds had been satellite tagged to date, and the Amur falcon was a potent symbol of conservation success in India.
80. Dr. Kumar recalled how a 10-minute conversation in 2012 had led to the crucial involvement of Nick Williams, and his subsequent declaration that Nagaland was the 'Falcon capital of the world'. It was now estimated that up to a million Amur Falcons stopped over in north-eastern India every autumn, with each stopover site holding 100,000 or more birds. The spring migration gateway appeared to be in southern Somalia and research was needed into this.
81. In recent years there had been a complete change in local attitudes, and people now organized festivals in October to welcome the arrival of the birds.
82. One factor driving the congregatory behaviour of Amur Falcons in north-eastern India in October was food. There were mass emergences of termites at this time, and the falcons probably played a role in regulating termite numbers. There were many opportunities for study.
83. A second project was the Action Plan for Vulture Conservation in India 2020-2025, under which the government-funded vulture population monitoring took place every four years as an integral part of the all-India Tiger monitoring programme. A few vulture tracking projects had been initiated, notably of White-rumped Vultures *Gyps bengalensis* in Himachal Pradesh, which had recorded very localized movements. Dr. Prakash at the Bombay Natural History Society had done tracking work to investigate how captive-bred vultures used landscapes after release.
84. The Saker Falcon had recently been identified as a possible resident breeder on the Tso Lhamo Plateau in Sikkim, although the majority of individuals recorded in India were migrants.
85. A secretariat for the Central Asian Flyway had been established as part of the Center for International Conventions at the Wildlife Institute of India on 9 October 2021.

86. The International Cooperation for Animal Research Using Space (ICARUS) programme had been established in cooperation with the Max Planck Institute, and satellite tracking of Amur Falcon, Steppe Eagle, Imperial Eagle *Aquila heliaca* and Pallas Fish-eagle was taking place to track the movements and migration of these species across India and the role of climatic variability.
87. The Chair congratulated all presenters for their excellent work and fantastic progress. He saw scope for publicity and outreach that would communicate these stories to a wider audience.
88. Dr. Ramírez added his congratulations and remarked on the amazing progress reported by each presentation.
89. Dr. Jones suggested that current arrangements for sharing presentations and other material using Microsoft Teams were not ideal, and that some kind of space should be created online for sharing and publicising this kind of information in an accessible and appealing form.
90. Dr. Jones also asked whether the guidelines for the safe design of medium voltage power lines adopted by the government of Mongolia had been translated, remarking that it would be an excellent example for other countries to follow if it could be shared.
91. Dr. Buij agreed that this could be an excellent resource.
92. Mr. Botha drew attention to a manual produced at the request of Research Triangle Institute, PowerAfrica and USAID focused on East Africa, prepared by the EWT-Eskom Partnership that would also be a useful source of practical information on this issue.

### 3.5 Report on implementation of the SakerGAP

93. Prof. Colin Galbraith (Saker Falcon Task Force) introduced document [UNEP/CMS/Raptors/TAG4/Doc.3.5](#), and gave a presentation, co-authored by Andras Kovaks, Umberto Gallo-Orsi and Rob Sheldon, titled “Saker Falcon GAP - Overview and progress.”
94. The world population of the Saker Falcon was estimated at 6,100-14,900 pairs occupying an extensive range across Eurasia and northern Africa. The estimated rate of decline of the population was over 50% in 20 years and the species was classified as Globally Endangered.
95. The discussion about listing the Saker Falcon in CMS Appendix I had been initiated in 2008 at CMS COP9, and at COP10 in 2011 Saker Falcon had been added to Appendix I of the Convention, and the Mongolian population to Appendix II. The Saker Task Force had been established under Resolution 10.28, and the SakerGAP had been developed between 2012-2014 and was adopted by COP11 in 2014.
96. The Goal of the SakerGAP was to re-establish a healthy, self-sustaining wild Saker Falcon population throughout its range. The five main approaches were to reduce the impact of electrocution, to ensure that trapping and taking were legal, controlled, and sustainable, to ensure that other sources of mortality had lower impacts, to ensure availability of suitable habitat, and to ensure effective stakeholder involvement during implementation.
97. Progress to date comprised:

- Questionnaires to all Range States issued in December 2017 seeking updates on progress implementing the SakerGAP and future plans;
- Preparation of a detailed Implementation Plan;
- Establishment of Electrocutation and Adaptive Management Framework Discussion Groups within the Saker Falcon Task Force (STF, 2021);
- Significant progress on the Flagship Projects by Range States and supporting organisations.

98. The Flagship proposals (and their achievements) were as follows:

- One Saker Falcon online information portal (one achieved);
- 10 Falcon Hospitals (12 achieved);
- 100 satellite tags deployed on Saker Falcons (75+ achieved);
- 1,000 artificial nest platforms erected for Saker Falcons (10,000+ achieved);
- 1,000,000 electricity poles made 'bird safe' (40,000+ achieved; delays due to Covid-19 restrictions).

99. Next steps were identified as being to:

- Coordinate the work of the Electrocutation and the Adaptive Management Framework Discussion Groups;
- Promote wider implementation at the National level;
- Support stakeholder engagement;
- Enhance fundraising and resource mobilisation;
- STF Steering Group to report to CMS CoP14 (2023).

100. The Chair asked whether there was anything the TAG could do to help stimulate funding.

101. Prof. Galbraith replied that he was hopeful of funding from CMS. Funding across the range states was needed, but he was fully aware of sensitivities to an adaptive management framework in some range states where the species was very endangered.

102. Mr. Prommer said that there had been many relevant activities in Europe and Asia, with the number of tagged individuals above the 100 mark, but collation and compilation of knowledge remained limited. It would be important, if possible, to gather all the studies and projects and compile synthesized results. He also considered it important to engage practitioners in China in Saker research and conservation processes, including satellite tracking, genetic studies, and nest boxes.

103. Prof. Galbraith agreed that better gathering and collation of data relating to Saker Falcons in Europe were needed.

104. Dr. Batbayar replied that the first Asian Ornithological Congress had taken place in China in November 2021. As a result, an Asian Ornithological Alliance had been formed with a structure that included national representatives and task forces. He had worked towards establishing a task force on raptors, and hopefully in future there would be a Working Group on Asian Raptors. Prof. Galbraith added that he was in discussion with a CMS delegate from China about joining the Saker Task Force.



105. Dr. Virani recalled that Dr. Andrew Dixon had been active in Mongolia, together with Dr. Batbayar, with funding from MBZRCF. He had recently made a film about 30,000 electricity poles that had killed 4,000 Sakers which TAG members should not miss.
106. Mr. Glowka pointed out that so far, the SakerGAP had relied largely on funding from the CMS Office – Abu Dhabi core budget provided by Environment Agency Abu Dhabi, with additional support from Saudi Arabia, the EU, and others during the development phase. Now that funding was required for implementation, it would not necessarily have to pass through the Raptors MOU. It would be important for practitioners to keep in mind the implementation priorities provided by the SakerGAP. Any resources mobilised could be helpful in terms of implementation.
107. Prof. Shobrak mentioned some activities relevant to Saker conservation in Saudi Arabia. As reported in his earlier presentation, trapping of Sakers had been banned, and there was an expectation that captive-bred birds would be released. He recommended releasing females, following the success of this approach with Peregrine Falcons in Saudi Arabia.
108. Prof. Galbraith identified satellite tracking of Sakers in Central Asia as an activity that would fill a crucial gap. He also considered adaptive harvest management to be an important approach in some countries, and work on geese could provide an example that could be followed. A key activity in 2022 would be to design the next programme of work. The Task Force would draft a proposal for the comment and input of the TAG in time for consideration by CMS COP14 in 2023. Prof. Galbraith concluded by saying that the success of the Saker Task Force was entirely due to the tireless work of its membership.
109. Mr. David Stroud (Invited Expert) suggested that CMS guidelines on adaptive management principles could be useful.
110. Dr. Jones agreed, pointing out that there were efforts within CMS on goose Adaptive Harvest Management, and on European Turtle Dove *Streptopelia turtur* as well as on Saker Falcon. Some alignment on principles of this approach within CMS would be sensible.
111. The meeting took note of document UNEP/CMS/Raptors/TAG4/Doc.3.5, and welcomed the outstanding progress made.

### 3.6 Report on the implementation of the Vulture MsAP

112. Mr. Botha gave a presentation based on document UNEP/CMS/Raptors/TAG4/Doc.3.6 *Report on the Implementation of the Vulture Multi-species Action Plan*.
113. The Vultures MsAP had been adopted at COP12 in 2017, and the timeframe for implementation was 2017-2029. It included 15 species of Old World Vultures in 128 countries, and provided a framework for action.
114. The overall goal of the MsAP was to provide conservation management guidelines, and rapidly halt population declines to return vulture species to a favourable conservation status.



115. The Strategic Implementation Plan included higher levels of implementation in Africa, and included 11 Flagship Projects addressing the principal threats, the most important of which was poisoning.
116. Following a mass poisoning event in Guinea Bissau in 2020 involving over 2,000 vultures, the IUCN Vultures Specialist Group was making efforts to address threats to West African Vultures. A review of trade and sentinel poisoning for West African vultures had also been completed for six species in cooperation with CITES. A Questionnaire on Non-Steroidal Anti-inflammatory Drugs (NSAIDs) and a Fact Sheet had been developed by a Working Group on NSAIDs.
117. Next steps were preparation of a framework for cooperation and a mid-term review of the MsAP in 2023, together with increased fundraising and more formally structured awareness-raising activities.
118. The second part of Mr Botha's presentation was a detailed progress report on the implementation of the MsAP in Africa. He stressed the importance of active national focal points to drive efforts forward and thanked Dr. Virani for his work in Kenya.
119. A Vulture Conservation Action Plan had been completed in Zimbabwe and plans were in preparation in six other countries, but this was an area where greater engagement of range states was needed and much more needed to be done. In-country champions were required to drive the process.
120. Poisoning was the most significant threat to vultures in Africa, exacerbated by a range of drivers, and the situation was more complex than in South Asia. Drivers included ready access to cheap, easily used pesticides, poor knowledge of legislation, public ignorance, and livelihood incentives provided by trade in wildlife parts. There were no clear patterns, and incidents were difficult to predict.
121. Numerous options were available to address the threat of poisoning, including protocols and training, improved reporting and data capture, and early warning systems using tracked vultures.
122. Wildlife poisoning response training since 2017 had resulted in the training of nearly 6,400 individuals in 13 countries, mostly in Eastern and Southern Africa. Participants were trained in identifying and rapidly responding to poisoning incidents, and post-training support was provided in three languages.
123. Energy infrastructure was a second major threat. Electric power networks were expanding and there were millions of kilometres of potentially lethal power line infrastructure. Massive knowledge gaps remained, and there was very limited monitoring. Enthusiasm for renewables could add to the impacts, depending on location and type of infrastructure. There had been some positive engagements, for example with the World Bank and with Eskom.
124. There were existing Vulture Safe Zones in Zambia, Botswana, and Zimbabwe, and there had been a workshop on the topic in 2019, but Vulture Safe Zones were an evolving process that might not be appropriate everywhere.

125. Research and monitoring were essential for filling knowledge gaps, and for the development of in-country skills and capacity. A significant number of projects had been completed or were under way, and 20-30 peer-reviewed papers on African vultures had been published each year since 2017.
126. Principle challenges to research and monitoring included difficulty raising resources, excessive bureaucracy, political instability and security issues, competition with a range of highly charismatic species, and a degree of ignorance and apathy among stakeholders.
127. Mr. Botha ended his presentation on a positive note by pointing out that Cape Vulture *Gyps coprotheres* had been down-listed in the most recent IUCN Red List from Endangered to Vulnerable. This had been the result of 50 years of dedicated work. Good news such as this could be used to motivate change for other species facing severe threats.
128. The Chair found the number of African students engaged in studies on vultures encouraging. He suggested that it might be valuable for the Raptors MOU to track publications, theses, etc relating to vultures, and maybe to raptors in general.
129. The meeting was shown a filmed presentation by Mr. Chris Bowden (RSPB) titled “Asian Vultures – current situation and response.”
130. Gyps vultures in South Asia, formerly super-abundant, had suffered catastrophic declines due to the widespread use of NSAIDs, principally diclofenac, by farmers. Poison baits were also an issue, particularly in Southeast Asia, and power infrastructure caused considerable mortality. The Saving Asia’s Vultures from Extinction (SAVE) partnership had been created in 2011 to address these issues.
131. Provisional Vulture Safe Zones (VSZs) had been established in Bangladesh, India, Nepal, and Pakistan, having a 100km radius. Detailed monitoring of threats was also under way. A vulture captive breeding programme had produced more than 60 birds per year, mostly in India.
132. Nepalese populations were currently showing signs of recovery in response to VSZs and the removal of diclofenac. Releases in India were more provisional, and diclofenac was still a problem in the country. The NSAID Ketoprofen had been banned for veterinary use in Bangladesh in 2021.
133. A threats map revealed the geographic extent of different threats in different parts of Asia, and together with national and regional Action Plans, had been very useful for keeping implementation efforts targeted.
134. The film concluded that the Vultures MsAP had provided a sound basis for vulture conservation efforts in South Asia.
135. Dr. Jones found it very encouraging that there had been good implementation of some aspects of the MsAP in some countries, but it was clear that the MsAP was not a priority in many countries. Consideration was needed of how to increase the number of in-country champions, and what would be the best way to engage them. She suggested that it might be possible to provide funding for exchange visits between key staff in governments of different range states, with the collaboration of NGOs and others in training opportunities. It might also be possible

to directly fund sub-regional workshops and the development of champions in selected countries.

136. Mr. Botha agreed with the importance of increasing the number and levels of expertise of national champions. The African BirdLife Partnership could be involved, but there was a lot of activity outside this network. There was more enthusiasm for solutions generated within Africa than coming from outside, and there could be value in practitioners learning from each other, looking at examples that worked well. An important next step might be to ensure the wider development of a suite of skills needed for implementation of the MsAP. This was urgently needed, especially in West Africa, where capacity and knowhow were not yet available.
137. Dr. Neil Deacon (TAG Member for Africa) reported that Zimbabwe had made good progress getting the MsAP signed off, but that momentum had been lost because there was no suitable champion to drive activities forward.
138. Dr. José Tavares (Vulture Conservation Foundation) gave a presentation titled “Implementation of the Vultures MsAP in Europe.”
139. Vulture populations were thriving in Europe although there were threats from poisoning and electrocution. Regional and National Action Plans had provided the basis for successful reintroduction and stocking programmes resulting in increasing populations and restored meta-populations.
140. Bearded Vulture had tripled its area of distribution and its population had increased by 360%. Griffon Vulture *Gyps fulvus* populations had enjoyed a 200% increase, and Cinereous Vultures a 50% increase. In addition, Rüppell’s Vulture *Gyps rueppelli* had extended its range from North Africa and become established in Southern Europe.
141. Poison directed at carnivores was a cause of secondary mortality in vultures, but the incidence of poisoning had decreased by 80% in 17 years in Spain. Mitigation methods included the establishment of a Wildlife Crime Academy programme by the Vulture Conservation Foundation, and the approach was being extended from Spain to other regions such as the Balkans.
142. Electrocution was the second biggest threat to vultures in Europe, and mitigation measures such as markers on power cables were being implemented together with electricity supply companies, whose effectiveness and profitability was also affected by electrocution events. EU legislation was being used to ensure that electricity companies met their responsibilities.
143. High availability of food was an important reason why vultures were thriving in Spain, which held 90% of European vulture populations. Livestock carcasses had previously been collected and incinerated under EU regulations, but amendments to the regulations allowed some carcasses to be abandoned. There were 192 fenced vulture feeding stations in Spain in 2017, and more than 13,000 farms were licenced to leave carcasses for vultures, providing three to four million kgs of food per year. More than 60% of Spain’s land area was now covered by the scheme, which was being replicated elsewhere in Europe and had so far been established in Portugal and Sardinia.

144. Dr. Tavares concluded by stressing that the know-how and expertise required to conserve vultures had been successfully developed and applied in Europe using a step-by-step approach. It would be essential to continue these efforts to ensure that Europe remained a land of vultures.
145. Mr. Botha said that Europe had provided excellent examples of good practice over a sustained period of time that could be duplicated elsewhere. A good example was the successful conservation of the Cape Vulture resulting in its recent down-listing on the IUCN Red List. The Vultures MsAP had played an important role in success stories in Europe, by leading to enhancement of existing activities. Challenges to vulture conservation were greater in other parts of the range, but activities in Europe provided an excellent example to follow.
146. Dr. Javed (TAG member for Middle East and North Africa) asked whether the feeding stations were provided by the government.
147. Dr. Tavares replied that there were clear regulations concerning the management of food supply sites, many of which were privately owned, but operated under a strict legal framework.
148. Mr. Feás (Expert TAG member) added that ownership differed in different areas. Laws differed between the 17 Autonomous Communities in Spain, some of which ran the food supply sites themselves, whereas in other communities, many such sites were owned and managed by NGOs.
149. Dr. Fernando Spina (Institute for Environmental Protection and Research, Italy) commented that Spain had taken the lead with its carcass management system, which had shown that it was possible to bypass the EU legislation and receive EU support to allow farmers to contribute to the management of vulture populations.
150. The meeting took note of document UNEP/CMS/Raptors/TAG4/Doc.3.6 *Report on Implementation of the Vulture MsAP* and of the further details provided, and welcomed the outstanding progress made for the conservations of vultures across the species ranges.

#### 4. Raptor Conservation Strategies

151. Dr. Gallo-Orsi introduced document UNEP/CMS/Raptors/TAG4/Doc.4 *Raptor Conservation Strategies* and summarized it in a presentation.
152. Paragraph 12 of the text of the Raptors MOU required Signatories, within two years of signing the MOU, to prepare and submit to the Coordinating Unit a national or regional (e.g. EU) strategy or equivalent documents (e.g. Single Species Action Plans) for Category 1 and, where appropriate, Category 2 species in Table 1 in the Action Plan.
153. To facilitate this process, Guidelines for Preparing National or Regional Raptor Conservation and Management Strategies had been prepared in 2012.
154. Progress to date had been disappointing, and only the Czech Republic and Switzerland had completed preparation of their plans, with plans for Norway and South Africa being under preparation. The European Union had prepared a regional strategy encouraging Member

States to produce their national documents. Three further countries had indicated that their raptor conservation strategy was incorporated in their National Biodiversity Strategies and Action Plans, namely Angola, Germany and Pakistan, and three countries had prepared plans for particular groups of species, namely India (vultures), Portugal (necrophagous birds) and Madagascar (Eleonora's Falcon *Falco eleonora* and Sooty Falcons). Single species Action Plans for particular raptor species had been prepared by a further seven countries.

155. The Coordinating Unit would welcome the input of the TAG to addressing the question of how Signatories could best be supported in the development and implementation of their national Raptor Conservation Strategies. Options discussed at TAG3 had included sharing existing Strategies, and guidance under existing tools, for example on poisoning and electrocution. Other ideas had included publicity of success stories through posts on websites, and a session at the MOS for Signatories to share experiences.
156. Finally, Dr. Gallo-Orsi asked the TAG for advice as to whether the Coordinating Unit should continue to prioritise assisting Signatories in the development of their National Raptor Conservation Strategies.
157. Dr. Javed said that progress with Signatories preparing Raptor Conservation Strategies was still far behind where it should be 13 years after the MOU came into force. Many Signatory countries were doing a lot of work on raptors, and maybe a requirement for a simpler Work Plan rather than a full-blown Strategy would be more effective.
158. The Chair considered this to be extremely important and suggested that Signatories could be required to provide a list of top priority actions.
159. Dr. Gallo-Orsi agreed that an improvement in delivery by governmental stakeholders of commitments relating to raptor conservation was required, and that a way needed to be found to focus the activities of Signatories to improve the conservation status of raptors.
160. The Chair introduced three presentations updating the status of national strategies in Norway, Switzerland, and South Africa.
161. Anne Martinussen (Norwegian Environment Agency, Norway) introduced herself, saying that her department was responsible for international nature conservation policy in Norway, and that BirdLife Norway had been hired as consultants to draft a report to act as a stepping stone that would provide the basis of the Raptor Conservation Strategy.
162. Mr. Paul Shimmings (BirdLife Norway) gave a presentation titled "Conservation of Birds of Prey in Norway."
163. A total of 51 species of raptor had been recorded in Norway, of which 25 were regular breeders (15 diurnal raptor and 10 owl species).
164. The Raptors MOU Guidelines had been used to address important threats and highlight priorities to improve the conservation of raptor species and maintain them in a favourable conservation status.

165. A report had been prepared in 2014 summarizing the conservation status of raptors. Another report had then been compiled summarizing the main threats, national objectives, and relevant activities to maintain all species of raptor occurring in Norway in a favourable conservation status.
166. This second report included a national strategy for 2020-2035, and included a species list, a list of monitoring programmes, site inventories listing IBAs, migration sites and breeding sites, a habitat inventory, threat assessments, and conservation guidelines. Priority conservation actions were also listed.
167. Progress had been made towards fulfilling the aim of paragraph 12 of the Raptors MoU with regard to preparing a National Strategy.
168. Mr. Shimmings concluded by referring the TAG to the two reports on the website of BirdLife Norway, titled “Conservation Status of Birds of Prey and Owls in Norway” (2014) and “Conservation of Birds of Prey in Norway – Guidelines and management priorities (2020).”
169. Ms. Anders Auran (Norwegian Environment Agency) pointed out that regarding the implementation of a national strategy from Norway, there was strong law enforcement where all raptors were protected. This in turn depended on a tool in which the necessary actions could be taken. They had therefore prepared a database of filtered important nesting sites (including many other sensitive species of concern). This information could be shared to relevant bodies and industries to take considerations for their impacts. For Norwegian authorities, this was an important tool, both for monitoring and taking actions.
170. Ms. Sabine Herzog (Federal Office for the Environment, Switzerland) gave a presentation titled “Swiss Strategic Guidelines and Management Priorities for Raptors – Experiences and outlook.”
171. She had presented TAG3 in Switzerland with planned activities towards preparation of strategic guidelines, and now she would present impressions of what had happened and lessons learned.
172. Raptors in Switzerland were thriving and 75% of species showed a positive population trend. The strategy had been undertaken to encourage structured discussions among Swiss stakeholders and experts, and to focus on themes that would otherwise not be covered by policy, such as lead, sites for migrating raptors, and neonicotinoids and pesticides.
173. The principal challenges to raptor conservation in Switzerland were sterile agricultural landscapes, disturbance from leisure activities, pesticides, lead, pigeon fanciers, and planning of wind farms. Illegal killing was not yet a problem, although this was likely to change as Eurasian Wolves *Canis lupus* became established.
174. It had been a lengthy process. The Swiss Ornithological Institute had been commissioned to do the technical work. The TAG3 meeting in 2018 had given helpful feedback for finalizing the Guidelines, and new national Guidelines had been submitted in September 2019.
175. Progress with implementing the strategy had been delayed by the rejection of Swiss voters in 2020 of a hunting law that would have banned the use of lead in the environment and regulated woodcutting, because it would also have weakened protection for the newly established

population of wolves in the country. There had been 45 parliamentary discussions of wolves since September 2020 which had paralysed other environmental legislation.

176. The international guidelines had been helpful and had provided good orientation, as all topics were well explained. A link to the MOU Action Plan was assured, and the necessary information for a comprehensive text were available.
177. On the other hand, the international guidelines were not directly applicable to Swiss national needs. Furthermore, it was felt that the wording of the term 'national strategy' was unhelpfully strong, and that the term 'strategic guidelines' would be better. Several adaptations to the Swiss national approach had been necessary, with regard to Swiss flagship species, threats and sites.
178. The principal lessons learned were that the process demanded a lot of time and effort, that collaboration between governmental and NGOs was important, and that prioritization, timing and feasibility were crucially important.
179. Achievements to date included the banning of lead in two cantons, and 26 wind farm projects going before a judge. On the other hand, the sites project had had to be stopped and the designation of sites important for raptors had to be put on hold, although monitoring of possible migratory sites protected by law continued.
180. An environmental crime coordination group had been established, and fines had been increased to improve enforcement and effectiveness of environmental law. It was expected that illegal poisoning would become an issue as the wolf population increased, and this would put raptors at risk of secondary poisoning.
181. Ms Herzog concluded her presentation with a summary of raptor migration records at four Swiss sites, the Col de Bretolet, the Col de Balme, the Gurnigel and the Défilé de l'Écluse.
182. Ms Humbulani Mafumo (Department of Environmental Affairs, South Africa) gave a presentation titled "South African experience in developing the National Vulture Conservation Strategy - from Conception to Implementation."
183. She stressed that the drafting of the Strategy, on behalf of the National Vulture Task Force (NVTF), had been a team effort involving representation from national government, conservation departments, NGOs, industry, community representatives and academic institutions. The team had started work in March 2020.
184. Seven vulture species occurred in South Africa and were included in the strategy, of which six were Globally Threatened under IUCN Criteria, five of them in the categories Endangered or Critically Endangered.
185. The Plan had taken a year to prepare, starting with unpacking the MsAP requirements into a local context, then identifying key players and their roles, using Biodiversity Management Planning (BMP) norms and standards to prepare individual BMPs per species. The finished plan had been presented to the NVTF in March 2021.



186. The Vision of the MsAP was 'Healthy growing populations of vultures in South Africa fulfilling essential biological and cultural ecosystem services.'
187. The Desired State was 'A safe and secure environment that allows vultures to fulfil all components of their life histories.'
188. A total of 12 objectives had been identified to meet the seven anticipated outcomes of the Strategy.
189. Achieving the Vision and Desired State of the strategy had been assisted by use of an adaptive management framework known as the Open Standards Approach to identify threats and required conservation interventions. The Conservation Standards were oriented around a 5-step adaptive management cycle: Assessment, Planning, Implementation, Analysis and Adaptation, and Sharing.
190. A total of 12 so-called strategies to reach the objectives were ranked according to their potential impact and their feasibility.
191. The Action Plan to implement the strategy was tabulated by the 12 objectives under the headings Actions, Lead Party, Collaborators, Resources needed, Deliverables, Timeline and Measurable outcomes.
192. The NVTF would oversee the implementation of the strategy, with a review every five years, making adaptive management critical.
193. An additional initiative linked to the National Vulture Conservation Strategy was the National Wildlife Poisoning Prevention Working Group established in 2018. This Working Group would involve a number of Task Teams, including the Agricultural Pesticides Task Team and the Lead Task Team.
194. The Chair thanked all contributors for their presentations and invited David Stroud to give his presentation summarizing the approach of AEWA, focussing on the role of monitoring and reporting.
195. Mr. Stroud gave a presentation titled "From counting to conservation – how monitoring and reporting drives actions for waterbirds within AEWA."
196. Mr. Stroud pointed out that major differences between AEWA and the Raptors MOU were that AEWA was legally binding, and that it had a regular cycle of meetings and associated legal procedures.
197. Site-based monitoring under the International Waterbird Census coordinated by Wetlands International had taken place annually since 1967 (and in many countries since the 1950s) and the results were used, together with additional information, for example from the EU Article 12 reporting process, as the basis of the AEWA Conservation Status Report. Every triennial AEWA MOP considered an updated edition of the Conservation Status Report and used it to inform revision by the MOP of Table 1 of the Agreement Action Plan. These revisions then fed into the adaptive revision of the legal text.



198. AEWA established status priorities at the scale of waterbird populations, and 565 waterbird populations were listed under three columns denoting their population status at a fine grain level in Table 1 of the Agreement Action Plan. Listing determined the legal status of populations for hunting, priorities for Action Planning, and priorities within the AEWA Strategic Plan.
199. The effectiveness of the system was shown by the fact that while the conservation status of many waterbird populations continued to decline, these declines appeared to be strongest in areas where there were fewer contracting parties and where knowledge of the status of waterbirds and key sites remained very poor, such as West Asia, and Central, Eastern and Southern Africa. Conversely, the conservation status of waterbirds was improving where concerted conservation measures were taken, where their key sites were protected, and their exploitation was well managed.
200. Results suggested that better monitoring led to the designation of a larger number of protected areas and that this led to better conservation status of waterbirds.
201. A key message was that there was an important link between better monitoring and use of data to designate and monitor sites, leading to better conservation outcomes for waterbirds.
202. The key aspects of the AEWA process were the regular, triennial cycle of MOPs and reporting, which comprised an adaptive process which drove actions based on monitoring. The regularity of the process kept the Agreement moving forward.
203. A weakness was that preparation of the triennial Conservation Status Report was not included in the core budget and was dependent on voluntary contributions from parties to the Agreement.
204. A lesson for the Raptors MOU was that a more regular and high-profile assessment cycle would lead to greater visibility within governments.
205. The Chair postponed discussion of Agenda Item 4 to the following day because of time constraints and asked for brief interventions.
206. The Vice-Chair led a short discussion on how to engage Signatories in a more effective way.
207. Mr. Botha noted Ms Herzog's point that terminology was crucial, and that use of the strong term 'strategy' could be off-putting to Signatories who might be more comfortable if they only had to prepare 'plans'. This was a political issue, and it might be part of the reason for the low uptake among Signatories of Raptor Conservation Strategies.
208. The low uptake of Strategies was of concern, and the TAG should consider possibilities for promoting the concept. Lack of uptake suggested that Conservation Strategies were not a high priority among Signatories, and this should probably be a point of discussion at the MOS in 2022.
209. It would be important for Conservation Strategies to include consideration of funding sources for work on the ground. This should always be an element of such Strategies and Plans.

210. Mr. Botha asked Ms. Mafumo why the Strategy in South Africa had only covered vultures and asked whether there were plans to extend the approach to the 84 species of diurnal raptors and owls occurring in the country.
211. Ms Mafumo replied that the Strategy had been prepared in response to adoption of the Vultures MsAP. Legislation permitted the preparation of a BMP for any species by any organization willing to contribute to conservation of one or more species. Black Harrier might be a future priority, but raptor conservation had a relatively low position in the list of priorities of the South African government. Better engagement was needed to consider how additional raptor species could be included in conservation planning.

## 5. Review of TAG Membership

212. Dr. Gallo-Orsi introduced document UNEP/CMS/Raptors/TAG4/Doc.5 *Status of TAG membership* and summarized it in a presentation.
213. He recalled that TAG members were appointed to serve for a period of two regular Meetings of Signatories and in exceptional cases, where the MoS so decided, may be nominated for a third term.
214. The current composition of the TAG had two vacancies following the passing of Jean-Marc Thiollay and the resignation of Sadegh Zadegan. The terms of all except one of the other TAG members were due to expire at MOS3. This risked a loss of continuity in the TAG's work, but provided an opportunity to improve the gender balance of the group.
215. Following the nomination and review process, new TAG members would be appointed by the MOS after consideration of the recommendations of a panel of four comprising the TAG Chair and Vice-chair, the Head of the Raptors MOU Coordinating Unit, and the Executive Coordinator of CMS Office - Abu Dhabi.
216. The TAG was asked to consider making recommendations to the MOS, especially regarding consideration of the extension of the terms of some of the current members in the interest of continuity.
217. The Chair said that he considered continuity to be absolutely vital, and he had written to see which of the current TAG members wished to continue and asked all TAG members with an interest in continuing their role to maintain contact with a Signatory or Cooperating Partner representative, so they were aware of their interest.

## 6. TAG Work Plan

### 6.1 Review of the TAG Work Plan (2016-2020)

218. Dr. Gallo-Orsi introduced document UNEP/CMS/Raptors/TAG4/6.1 *Review of the TAG Work Plan 2016-2020*, with the Work Plan included as Annex A, and gave an introductory presentation.

219. Good progress had been made in addressing the list of 20 tasks in the Work Plan, and 12 tasks had been completed, five were under way and three had not been addressed. The tasks that still needed to be addressed were No. 7, exchange guidance and address impacts of renewable energy generation e.g. wind and solar, No. 13, sharing of data on raptors, and No. 20, Support scientific and technical actions for the Raptors MoU listed in the Programme of Work on Migratory Birds and Flyways (CMS Resolution 11.14).
220. The meeting reviewed the Work Plan and took note of the status of the activities.

## 6.2 Amendments to the MOU

221. Dr. Gallo-Orsi gave a presentation titled “Proposed amendments to the MOU and its Annexes.”
222. Revision of the MOU and its Annexes was an important means of making progress, and the presentation outlined the consultation process before MOS3.
223. Under the Rules of Procedure, the TAG was sanctioned to make proposals for amendment of the MOU and its annexes, and to comment on proposed amendments from Signatories. The deadline for the submission of proposals from Signatories was 150 days before the MOS, and for proposals from the TAG it was 90 days.
224. Concern had been expressed at MOS2 about the short time available to make comments on proposed amendments, and Dr. Gallo-Orsi outlined a timetable that would allow Signatories 75 days to comment on proposals of other Signatories, then the TAG a further 15 days to assess and prepare the responses to the comments. If the proposed amendments were approved by the TAG, it should be possible to circulate them well in advance of the 150 days before the MOS deadline, allowing the Signatories further time for comments.
225. The proposed timeline assumed a date of 13 October 2022 for MOS3, but the actual dates and location of the next MOS remained uncertain.
226. The Chair pointed out that Dr. Gallo-Orsi’s proposal would buy time to take forward advice to the MOS, and noted that key deadlines in 2022 would be, assuming MOS3 would take place in October 2022, 15 February, 16 May, 30 May, and 15 August.

### 6.2.1 MOU text changes and amendments to the Action Plan and Table 2

227. Mr. Dave Pritchard (Consultant) introduced document UNEP/CMS/Raptors/TAG4/Doc.6.2a and its three Annexes, and gave a presentation titled “MOU text changes and amendments to the Action Plan and Table 2.”
228. The document contained proposals for consideration and possible adoption by MOS3. It included a review of the Action Plan undertaken in 2020, including text about implementation, and changes to the structure and content of the Action Plan text and the MOU. Mr. Pritchard thanked the TAG members for their input during several rounds of consultation.
229. The review included ideas for more workable and coherent framing, and better alignment of different parts of the text.

230. In the MOU text itself, reference had been added to Accipitriformes in two places, following a revision of the taxonomy of the Order Falconiformes.
231. Paragraph 8 of the text on general conservation measures had been rationalised, streamlined, and refined (with the input of TAG members) so that it aligned closely with the Action Plan.
232. Two country names had changed since the drafting of the original text, and in the section on Geographical scope, the name Swaziland had been replaced with Eswatini, and the former Yugoslav Republic of Macedonia with North Macedonia.
233. In the Action Plan, the introductory part, Section 4 (“Priority Actions”) had been rationalised and streamlined to match the rest of the package of proposals. Table 1 and Table 3 of the Action plan relating to species categorizations and the site list had been addressed by BirdLife International and would be reported separately.
234. Table 2 of the Action Plan had been reorganized to match the rest of the package, clarified, refined, and streamlined, and the columns had been fleshed out. Previously missing material on indicators had also been included.
235. The Chair congratulated Mr. Pritchard on his successful completion of an extremely important task, and the TAG endorsed the proposed changes to the MOU text, amendments to the Action Plan, and updates to the Action Plan Table 2, with a recommendation for adoption at MOS3.

### 6.2.2 Changes to the species list

236. Dr. Jones gave a presentation titled “Changes to the species list,” co-authored by Lucy Haskall and based on document UNEP/CMS/Raptors/TAG4/Doc. 6.2b and its five annexes, titled “Proposed Amendments to Annex 1 and Annex 3 Table 1 of the Raptors MOU.”
237. A number of updates had been discussed at the TAG3 meeting in December 2018, but further updates were proposed in October 2021 using the most recent 2021 IUCN Red List data. The reasons for proposed updates were changes in the migratory status of species, and changes in taxonomy and nomenclature.
238. At TAG3, it had been agreed to replace Brown Boobook *Ninox scutulata* with Northern Boobook *Ninox japonica* on Annex 1, but following a review of movements of wild individuals, the TAG had not supported adding Bonelli’s Eagle *Aquila fasciata* to Annex 1.
239. A proposed update in 2021 was the addition of Yellow-billed Kite *Milvus aegyptius* to Annex 1 following a taxonomic split from Black Kite *Milvus migrans*. Information on movements indicated that Yellow-billed Kite was a partial inter-African migrant whose movements were described in Annex A of document UNEP/CMS/Raptors/TAG4/Doc. 6.2b, and it was proposed to retain Black Kite, and add Yellow-billed Kite to Annex 1, resulting in the number of species in Annex 1 increasing from 93 to 94.
240. Dr. Jones introduced the new form for proposal of species for Annex 1 contained in Annex E of document UNEP/CMS/Raptors/TAG4/Doc. 6.2b. The aim of the form was to maximize the relevance and quality of proposals for Signatories submitting amendments.

241. Further proposed updates concerned Table 1 of Annex 3, where Annex 1 species were divided into three categories according to their global and regional conservation status. Category 1 comprised Globally Threatened and Near Threatened species, Category 2 comprised species considered to have Unfavourable Conservation Status at a regional level within the Range States and territories listed in Annex 2 to the MoU, and Category 3 comprised all other migratory raptor species. Category 2 classification was based on regional Red Lists and sources such as BirdLife International's classification of Species of European Conservation Concern.
242. Proposed Annex 3 Table 1 category changes were summarized in Annex B of document UNEP/CMS/Raptors/TAG4/Doc. 6.2b. The changes resulted in 32 species in Category 1, 27 species in Category 2 and 35 species in Category 3. More details were provided in document UNEP/CMS/Raptors/TAG4/Inf.5.
243. Dr. Jones asked TAG members if, in relation to Category 2 species, they were aware of regional processes to assess species conservation status, or if TAG members felt that the conservation status of any species was not accurately reflected in the Table listings, to inform the Red List team at BirdLife International headquarters.
244. A comparison of the Raptors MOU Table 1 with the CMS Appendices revealed one species – Black Harrier - that could qualify for CMS Appendix I, and one species – Snowy Owl *Bubo scandiacus* – that could qualify for CMS Appendix II. Interested CMS Parties or Range States could now propose these species for listing on the relevant CMS Appendix ahead of the next CMS COP, and the TAG could potentially offer technical support.
245. The TAG would need to submit a document to MOS3 covering the species-related amendments to the Annexes, explaining the proposed changes to Annex 1 and Annex 3 Table 1, and providing updated versions of Annex 1, Table 1, and the species proposal form.
246. Prof. Shobrak raised concern regarding the status of Lanner Falcon *Falco biarmicus*. There had been no nests in Arabia in recent years and he considered the species Critically Endangered at regional level. He supported maintaining the Lanner Falcon in Table 1 of Annex 3, in Category 2.
247. Mr. Botha drew attention to a process that had resulted in a Red List for South Africa, Lesotho and Eswatini (then Swaziland) in 2015. Information should be available from this process for classification of category 2 species in Table 1 of Annex 3. He was aware of similar processes in Namibia and Botswana, and there were a number of processes completed or under way that would probably be helpful.
248. Mr. Botha added that Martial Eagle *Polemaetus bellicosus* and Secretary Bird *Sagittarius serpentarius* did not appear on the lists presented by Dr. Jones, and both species were endangered migrants according to tracking data. He suggested considering these two species for future proposals.
249. Dr. Jones considered it probably worthwhile to propose Secretary Bird for listing under Annex 1 of the Raptors MOU, and a Signatory could go ahead with this. Information available until recently suggested that movements of this species were nomadic, not migratory, but it sounded as if this would now be worth reviewing.

250. Dr. Gallo-Orsi reminded the meeting that a report titled “The Conservation Status and Distribution of the Breeding Birds of Prey of North Africa” had been published by IUCN the previous week, and that this would be a useful source of information for Category 2 of Table 1 Annex 3.
251. Prof. Shobrak said that Yellow-billed Kites bred in south-west Arabia and migrated to Africa, and that they bred separately from Black Kites.
252. Dr. Jones replied that this was helpful information, but it raised the question how to interpret the term ‘regional’. She considered national level Red Lists to be too fine grain to be considered under Category 2.
253. The Chair suggested that further consideration should be given to proposing Martial Eagle and Secretary Bird to Raptors MOU Annex 1. There was also a need to clarify the precise meaning of the term ‘regional’ with regard to Table 1 Annex 3 Category 2 species.
254. The TAG:
- Endorsed proposing Yellow-billed Kite *Milvus aegyptius* to Annex 1 and Table 1;
  - Endorsed the proposed update to Annex 1 incorporating changes proposed at TAG3 and TAG4;
  - Endorsed the proposed category changes in Table 1 resulting from changes of conservation status or population trends of 16 Annex 1 species;
  - Considered reminding Signatories of the two Annex 1 species that could be proposed by Parties to CMS for inclusion in the CMS Appendixes;
  - Endorsed the proposal form to list species on Annex 1.
255. Prof. Shobrak reiterated the importance of the issue of how to specify regions and the term ‘regional’.
256. The Chair suggested that this topic could be carried over to the following day or discussed inter-sessionally.
257. Dr. Gallo-Orsi agreed that this was an important discussion. The Red Listing process was continent-wide, but meaningful regional assessments were also relevant and important. He proposed including the issue in the discussion of the Work Plan the following day.

### **6.2.3 List of important sites for migratory birds of prey**

258. Dr. Jones gave a presentation titled “List of important sites for migratory birds of prey” and referred to document UNEP/CMS/Raptors/TAG4/Doc.6.2c and its three Annexes.
259. After MOS1, TAG had proposed a significantly more comprehensive updated list of internationally important sites as Table 3 Annex 3 of the Action Plan for consideration of Signatories in advance of MOS2.
260. After consultation with Signatories, a more comprehensive site list had been submitted to MOS2, but the EU had requested further work on the site list, and it had not been adopted by

- MOS2. The EU provided specific details of the required changes, and these had been considered at TAG3 and a summary of changes had been provided to the TAG by BirdLife.
261. The main categories of change had been 18 raptor species newly listed on Annex 1 at MOS2, and removal of category D (non-significant) populations from SPAs on draft Table 3, resulting in removal of some SPAs.
262. Since TAG3, proposed new sites from Switzerland had not yet been submitted, but would be included if they arrived before MOS3.
263. Dr. Jones suggested that the change in country name from the former Yugoslav Republic of Macedonia to North Macedonia could already be anticipated by changing the name in Table 3 before approval by MOS3. Since there were no Table 3 sites in Eswatini, the name change from Swaziland would not affect Table 3.
264. Some minor corrections in nomenclature were also needed.
265. Dr. Jones proposed submitting the current draft of Table 3 to Signatories, together with the explanatory document UNEP/CMS/Raptors/TAG4/Doc.6.2c Annex A. Revisions since MOS2 were identifiable in the site list and it was proposed that draft Table 3 should be circulated to Signatories in both pdf and Excel formats with the changes highlighted.
266. The TAG endorsed:
- Changing the name and (alphabetical) order of North Macedonia in the sites list to be sent to Signatories for consultation ahead of MOS3;
  - Sending the sites rationale document to Signatories (Annex A of document 6.2c);
  - Circulating the sites list (Annex C document 6.2c) to Signatories ahead of MOS3, and the approach to identifying in the sites list the changes made since MOS2 using coloured highlights and 'Track Changes'.
267. Prof. Shobrak pointed out the need to align the species and site lists, so that, for example, now that Yellow-billed Kite had been included in the MOU, sites important for this species could be added.
268. Dr. Jones replied that this approach was already a part of the methodology for listing sites. If there were changes to the species list, the TAG worked on the site list in the subsequent intersessional period. The MOS needed to endorse the species list before sites could be included for a species.
269. Mr. Glowka thanked Dr. Jones and Mr. Pritchard for their considerable contributions to the proceedings of the meeting. They had done invaluable work over a year and a half, putting together the documents that had just been endorsed. Their professionalism and institutional knowledge were a great asset to the TAG and the Raptors MOU.
270. The Chair and Dr. Gallo-Orsi reiterated Mr. Glowka's thanks and extended them to all TAG members at the end of the second day of the meeting.



### 6.3 Raptor Safe Zones

271. Mr. Botha introduced document UNEP/CMS/Raptors/TAG4/Doc.6.3 *Raptor Safe Zones: Can the Vulture Safe Zone concept be applied to other raptors?*
272. Vulture Safe Zones (VSZs) had originated in South Asia, principally in response to the threat posed by Diclofenac and other NSAIDs, and 12 VSZs had been implemented in Nepal, India, Pakistan and Bangladesh. There had been considerable government buy-in, particularly in Nepal and Bangladesh.
273. Discussion at a BirdLife International Flyways Summit in 2018 had concluded that VSZs were not necessary in Europe, but that they should be considered in Africa, and criteria should be developed. The concept was also being considered in south-east Asia, but with a focus on pesticides.
274. There were numerous questions relating to whether VSZs were appropriate in Africa because different concepts and principles applied across the range, and it was an evolving process that might not be effective everywhere. There were currently VSZs in Botswana, Mozambique, South Africa, Zambia and Zimbabwe, and a trans-boundary VSZ on the borders of Botswana-Zimbabwe-South Africa.
275. The concept of Migratory Raptor Safe Zones also raised questions, for example when considering the flyways of long-distance migrant raptors such as Amur Falcon, whose flyway covered a significant portion of the earth.
276. Important questions included who would promote and drive the establishment and implementation of sites, and who would provide resources.
277. Mr. Botha concluded that there were too many uncertainties for the TAG to decide whether It would be important to promote Migratory Raptor Safe Zones at the current meeting, but discussion should continue inter-sessionally and possibly at future meetings.
278. The Chair agreed with Mr. Botha's conclusion and considered it important to consider the pros and cons and to keep the idea of Migratory Raptor Safe Zones on the radar.
279. Dr. Jones thought it important to consider the successes of Vulture Safe Zones, and to assess what elements could be applied to Migratory Raptor Safe Zones. They were conceptually different from key sites, which had numeric, species-specific thresholds as the basis of their designation. Migratory Raptor Safe Zones would be more about conservation responses and achieving levels of control of threats. Both approaches were valuable, but were trying to achieve different things. She considered further intersessional discussion to be a useful way forward on this issue.
280. Dr. Gallo-Orsi pointed out the potential importance of data sources such as satellite tagging, eBird, and the Global Raptor Information Network (GRIN) in identifying Migratory Raptor Safe Zones in future, and agreed with the conclusion that no way forward could be decided at the current meeting.



## 6.4 Pilot Site Network Analysis

281. Dr. Jones gave a presentation titled “Pilot site network analysis,” co-authored by Ben Jobson, based on document UNEP/CMS/Raptors/TAG4/Doc.6.4 *Raptors MOU site network pilot analysis for draft Table 3 sites*.
282. TAG3 had agreed a list of 11 pilot species and a method for assessing congregatory behaviour that were summarized in detail in Annex 2 of document UNEP/CMS/Raptors/TAG3/Doc.4.2b. Approaches to the conservation and management of critical areas had also been tested, bearing in mind that site-based conservation may not be appropriate during non-congregatory parts of the annual cycle.
283. The pilot species were Rüppell’s Vulture, Lappet-faced Vulture *Torgos tracheliotus*, Egyptian Vulture, Cinereous Vulture, Steppe Eagle, Wahlberg’s Eagle *Hieraetus wahlbergi*, Mountain Hawk-eagle *Nisaetus nivalensis*, Pallas’s Fish-eagle, Grasshopper Buzzard *Butastur rufipennis*, Amur Falcon and Lanner Falcon.
284. Methods of analysis involved overlaying Table 3 sites onto BirdLife species distribution maps. Duplicate sites were omitted by overlaying, for example, SPA sites onto IBA sites and deleting those that overlapped by more than 50%.
285. Example maps were presented of three species. For Pallas’s Fish-eagle, representation of mapped sites appeared reasonable, although there were sites in an area where the species was possibly extinct, requiring verification. For Lappet-faced Vulture, the species was poorly covered on draft Table 3, and BirdLife maps were based on out-of-date distribution and status data, resulting in an incomplete site map. For Amur Falcon, Table 3 was data-deficient, and there was minimal data on congregations, resulting in a species for which sites of international importance remained to be identified.
286. Document UNEP/CMS/Raptors/TAG4/Doc.6.4 Annex A showed the number of draft Table 3 sites (IBAs) falling within different polygons of the BirdLife species range map and provided tabulated data including the number of sites identified at different stages of the life cycle, congregation sizes, and provisional thresholds for identifying important sites. Columns were shaded in various colours to highlight the data quality and show gaps in information.
287. Three of the pilot species, Grasshopper Buzzard, Mountain Hawk-eagle and Wahlberg’s Eagle, had no sites on draft Table 3, and beyond the pilot species there were 28 other Annex 1 species which did not have sites of international importance identified in draft Table 3.
288. The approach could help TAG advise on which Annex 1 species had significant and genuine gaps in the network of internationally important sites in draft Table 3. Further discussion was needed on what kind of recommendations could flow from such an analysis, with the aim of increasing the comprehensiveness of the Table 3 site network for Annex 1 species. For different Annex 1 species, it might be possible to identify which geographic areas were most important for targeting gap-filling surveys. More recent information was required for some of the Table 3 sites.
289. Dr. Gallo-Orsi added that this was very important guidance that would help maximize the usefulness of the list of sites. The approach only needed the approval of the MOS before it

could be adopted for all Annex 1 species. He then asked how much satellite tagging data had been used to identify gaps in the site list. It seemed likely that for many species such as Amur Falcon, satellite tracking data would help identify many additional sites.

290. Dr. Jones agreed that this would be a really useful addition, and that there was potential to include a lot more information from satellite tracking studies.
291. Mr. Stroud pointed out that many or most IBAs were functionally unprotected and asked whether the protection status of sites had been included in the analysis.
292. Dr. Jones replied that a start had been made in looking at the protection status of sites and suggested that this could be taken forward in the next work plan.
293. Mr. Botha reiterated the importance of the work, and the potential of satellite tracking data to contribute. Work on Wahlberg's Eagle tracked from South Africa and Kenya had shown that both populations appeared to migrate to the Sahel region in Sudan, which would probably qualify as an important congregatory area for the species. An increasing amount of satellite tracking data was becoming available and it would be very useful to keep this under review.
294. Another important recent discovery had been of a massive overwintering area for Red-footed Falcon *Falco vespertinus* in Angola where more than a million birds had been recorded. This species was listed in Annex 1 and was in Category 1 of Table 3 of the MOU, and it would be essential to protect such congregations.
295. Dr. Kumar said that many IBAs in India listed for birds of prey were protected. He then noted that enormous amounts of data were collected in India using eBird and suggested that this could be a valuable source of data for the Raptors MOU site lists. The app could be used to generate heat maps as well as site lists, and there were extensive areas in India that would not qualify as 'sites' that were nevertheless important for congregations of raptors, such as the border area between Gujarat, Rajasthan, and Pakistan. He concluded by saying that the tracking information available for Amur Falcons was exceptional and that information about movements was still lacking for most raptor species in South Asia.
296. Prof. Shobrak drew attention to a long, narrow area between the Red Sea and the parallel mountain range in Arabia where congregations of species such as vultures were found. There was also an area in central Saudi Arabia around Riyadh where 6-7,000 Steppe Eagles spent the winter. Some important congregatory areas for raptors were garbage dumps, and the attractiveness of such areas to raptors was dependent on waste management policies which were likely to change in future. There were other important areas for raptors close to airports, where they were discouraged by the airport authorities for safety reasons. The importance of some of these areas was well-known and published, but it was not clear how the bird populations that used them could best be protected.
297. Dr. Jones considered this to be important and worthy of detailed discussion. Ephemeral sites such as those described by Prof. Shobrak were often extremely important. Extensive areas larger than 'sites' that were important for congregations of raptors were also important and should not be forgotten. Thought was needed about appropriate conservation measures in these areas.

298. Dr. Jones continued that inclusion of eBird and satellite tracking data into the analyses would be the next step forward and would fill many gaps in knowledge.
299. Dr. Buij pointed out that tracking data was available across Eurasia, and The Peregrine Fund and its GRIN team was eager to help build on BirdLife's project in the African-Eurasian Flyway to gather the available information on mortality among GPS/satellite-tagged raptors along all Old-World flyways. A multi-species assessment on where and when mortality of tracked raptors occurred along flyways and what the cause might be could really help inform the work of the MoU. The satellite tagging data out there was an untapped resource at present, for this purpose, as well as for the identification of key stopover and nonbreeding sites. He hoped that the TAG would look at this further as part of the next workplan.
300. The Chair considered that the importance of waste dumps, airports and other ephemeral, human-influenced sites should be included in the programme of MOS3 in 2022.
301. Mr. Stroud suggested that Dr. Jones's site network analysis and issues raised in the discussion could be published in a scientific journal, and the Chair suggested that Biological Conservation might be interested in this as a pilot approach.
302. Dr. Gallo-Orsi concluded that an extended version of this analysis should be included in the future workplan. This should also cover looking at ways to address gaps in information using sources such as eBird and satellite tracking data. Finally, discussion about how to deal with ephemeral sites such as city rubbish dumps should be included at MOS3.
303. The Chair said that a paper on this work should be included at MOS3 in 2022.

### 6.5 Conservation Status Assessment Report

304. Dr. Jones gave a presentation, co-authored by Lucy Haskell, based on document UNEP/CMS/Raptors/TAG4/Doc.6.5 and its Annex *Conservation Status Assessment Report Concept*.
305. For the MOS to have an overview of whether a favourable conservation status was being achieved and maintained for the species on Annex 1 of the MOU throughout their range, it could be valuable for a report to be submitted periodically to future Meetings of the Signatories summarizing what was known about the conservation status of Annex 1 species and highlighting any knowledge gaps.
306. The concept for a Conservation Status Assessment Report (CSAR) had been presented at an informal meeting of TAG in April 2021, and an outline of the proposed report content for a first trial report to be produced by TAG and presented at MOS3 was provided in Annex A to document UNEP/CMS/Raptors/TAG4/Doc.6.5.
307. The CSAR would try to answer the following questions and report on the following issues:
- What is the current conservation status of migratory raptors in Africa-Eurasia and how has this been changing over time?

- What are the indications of how well we are doing at halting and reversing population declines of migratory raptors in Africa-Eurasia?
  - What are the threats recorded to be affecting Annex 1 species?
  - Which habitats are of key importance for Annex 1 species?
  - Conservation actions: Overview of gaps in Species Action Plans (as per TAG3)
  - Conservation actions: Comparison of Raptors MOU Table 1 Category 1 and CMS Appendices
  - Identification of key knowledge gaps.
308. For MOS3, it was proposed that the CSAR would be a relatively small-scale test of concept. MOS3 would also test national reporting, and there could be some link between the two types of reporting.
309. It might be possible to draw additional information into the report, for example, mortality data obtained from satellite tracking. Expanding satellite tracking results from Africa into other regions could also be really informative.
310. Site data would be important in future CSARs, but for MOS3, since Table 3 was still under discussion, site data would be limited.
311. Much still needed to be done to achieve anything comparable with the AEWA process outlined by David Stroud under Agenda item 4, but waterbird monitoring was 50 years ahead of intensive work on raptors.
312. The Chair asked whether the status of the legal protection of raptors was included in the proposed CSAR.
313. Ms. Jones replied that this was an important topic, but that it had not yet been decided how best to report on it. Greater clarity was required as to which topics would be included in the CSAR, and which in the synthesis of the national reports submitted by Signatory governments. She would contact Szabolcs Nagy, lead author of recent AEWA Conservation Status Reports, to clarify this issue.
314. Mr. Stroud said that AEWA had evolved three review and reporting documents that were prepared for each MOP: i) the Conservation Status Report; ii) the Summary of National Reports, and iii) the review of progress against Strategic Plan targets.
315. The TAG approved the basic concept put forward for a regular Conservation Status Assessment and pending a decision to be taken early in 2022 on whether topics E and F should be included in CSAR (which summarizes the status of Annex 1 raptors) or alternatively in one or more documents summarizing the responses by Signatories and range states, approved the content put forward for the first CSAR for MOS3.
316. Dr. Gallo-Orsi expressed great satisfaction with the approach described by Dr. Jones, and considered it helpful to build on the experience and approach of AEWA. Considerable intersessional work would be needed to produce a CSAR before MOS3, and it was exciting to be at the start of a process that would better inform decisions by the Signatories at the MOS.
317. Mr. Stroud reflected that the AEWA Conservation Status Report (CSR) brought excellent data and information together, but the Agreement was not yet making the best use of them. AEWA

was now producing a glossy summary of the main points and key messages in the CSR for outreach purposes. It was anticipated that a range of outputs would be produced for different audiences using the same data.

318. The Chair concluded that the draft CSAR would need to be refined inter-sessionally and submitted to MOS3.

## 6.6 Proposed National and Cooperating Partner report forms

319. Dave Pritchard gave a presentation titled “Proposed National and Cooperating Partner Reporting Forms,” based on document UNEP/CMS/Raptors/TAG4/Doc.6.6 and its two Annexes.
320. Previous surveys of Signatories and Cooperating Partners had been occasional, ad hoc, and voluntary. It was unusual for a CMS instrument not to have a format for regular progress reporting, and for the Raptors MOU, this had been significantly delayed. The TAG had been tasked, in paragraph 15 of the Memorandum text, with developing a format, and document UNEP/CMS/Raptors/TAG4/Doc.6.6 was a response to this, with Annex A being the format for reports from Signatories, and Annex B for reports from Cooperating Partners.
321. The approach was mindful of reporting burdens and focussed on 11 key issues.
322. The format had been designed to align with the existing format for reporting to CMS, and with proposed amendments to the MOU and Action Plan, as summarized in document UNEP/CMS/Raptors/TAG4/Doc.6.2a. It had benefited from the input of the TAG in 2021, a trial run was under way, and informal results of this would be shared at MOS3 in 2022.
323. Ms. Herzog said that Switzerland was one of the countries seeking synergies in reporting for different instruments, and she was grateful that the format for reporting for the Raptors MOU aimed to minimize the reporting burden and that it was coherent with reporting for CMS. She felt nevertheless that there was still some duplication with CMS reporting and that greater precision might be possible in the proposed formats.
324. Mr. Botha noted that the half-term reporting for the Vultures MsAP was due in 2023 and asked whether there were plans for progress reporting by Signatories and Cooperating Partners.
325. Dr. Gallo-Orsi replied that it would be necessary to start planning, and that the review of the MsAP should be incorporated into the TAG Work Plan during 2022.
326. He added that the Coordinating Unit had been working closely on this with Mr. Pritchard and the Signatories, and that all comments received on the forms had been, and would be, considered.
327. Mr. Botha suggested that it might be useful to obtain feedback from representatives of Signatories and Cooperating Partners who had completed the reporting.
328. The Chair confirmed that subject to further review, the meeting endorsed the formats of the forms for forwarding to Signatories with a recommendation for adoption at MOS3.

## 6.7 Horizon scanning and emerging issues

329. The Chair introduced document UNEP/CMS/Raptors/TAG4/Doc.6.7 *Raptor Conservation and Management issues: Horizon Scanning*, and drew attention to published Horizon Scans, for example for waders by Prof. Bill Sutherland, and studies of particular species or wildlife groups. Horizon scanning allowed emerging issues to be identified in good time, and the Raptors MOU had a range of issues to consider as a result of rapid environmental, societal and economic changes.
330. Dr. Fernando Spina (ISPRA, Italy) gave a presentation titled “The Eurasian African bird migration atlas – a dream coming true and a step towards the CMS Global Migration Atlas.”
331. Bird ringing in Europe had largely been undertaken by citizen scientists since 1899. The EURING databank was a unique example of data sharing, and now contained over 24 million data records relating to more than 600 species.
332. There was huge potential for analyses of movement ecology, connectivity, phenology, distribution, habitat use, demography, survival, dispersal, and responses to climate change. These analyses would feed into conservation and management.
333. Many countries had produced national atlases based on ringing data at national level, but funding for an atlas at inter-continental scale had only become available in 2017 thanks to the Ministry of the Environment of Italy.
334. The historical data were of considerable value and shed light on changes, for example in human-related mortality along the flyway, over a period of more than 100 years.
335. The main components of the atlas were: ring recovery collation and validation, tracking data, development of web tools and solutions, mapping, and species accounts.
336. The analysis modules were: migration seasons of hunted species, an analysis of killing of birds by man, a connectivity analysis, and an analysis of changes in migration patterns.
337. All of these analyses would inform the Raptors MOU and help identify emerging issues, particularly in relation to changes in distribution and migration as a result of climate change, and connectivity of species in different regions.
338. Publication of an open access, online atlas was anticipated in April 2022, including maps for more than 300 species and information about tracking studies of 150 species.
339. Prof. Miguel Ferrer (Spanish National Research Council, Spain) gave a presentation titled “Reintroductions as a tool for conservation of migratory raptors.”
340. Potential reintroductions needed to meet 11 Viability Criteria, starting with historical records of the species in the area and removal of causes of previous extinction. Other criteria included availability and carrying capacity of suitable habitat, and consideration of new potential problems in the area such as electrocution.

341. A sustainable source of genetically appropriate young birds to introduce was essential, and consideration was needed of whether to use wild or captive bred young birds, and how many of each sex would be most appropriate. The duration of the programme needed to be assessed using population modelling, and monitoring of the results of any programme was crucial. For most species, about 100 nestlings needed to be released, preferably over a relatively short time period.
342. A reintroduction programme had successfully connected relic populations of Spanish Imperial Eagle *Aquila adalberti* in southern Spain, and regular movements into north-west Africa were now recorded. The annual population growth rate was 5% and the population had grown from 21 to 140 pairs in Andalusia.
343. Ospreys *Pandion haliaetus* had become extinct in Andalusia in 1982 and a reintroduction programme had been initiated in 2003. By 2017, there were 32 occupied territories.
344. For the second part of his presentation, Prof. Ferrer considered climate change and the distribution of Northern Hemisphere raptors. The breeding ranges of some species in Europe were already shifting north, and species formerly confined to Africa were now breeding in southern Europe.
345. Population trends at local level did not always reflect the overall continental trend, and while Egyptian Vulture was decreasing in southern Spain, it appeared to be increasing at a European level, and the reintroduction programme in southern Spain might be inappropriate.
346. Range shifts from Africa into Europe were affecting Long-legged Buzzard *Buteo rufinus* and Rüppell's Vulture. Long-legged Buzzards had started hybridizing with Common Buzzards *Buteo buteo* in Spain, threatening their genetic integrity. Climate change was the cause of these range extensions, and the Government of Andalusia was treating Rüppell's Vulture as an Alien Invasive Species whose introduction was threatening biological diversity.
347. Policy makers needed to decide whether to attempt to avoid the natural response of species such as Rüppell's Vulture to climate change. It seemed preferable to adopt an evolutionary viewpoint, and to avoid judgement of species on their origins.
348. Prof. Arjun Amar (FitzPatrick Institute of African Ornithology, University of Cape Town) gave a presentation titled "Horizon Scanning - Human-raptor conflicts."
349. Conflicts between wildlife and people generally occurred when one party was perceived to assert its interests at the expense of another. Conflicts were thus usually between two groups of stakeholders (not so much with the wildlife itself) and usually involved conservation versus economic interests.
350. Raptor species causing conflicts included White-tailed Sea-eagle *Haliaeetus albicilla* and Golden eagle; in Europe, and Verreaux's *Aquila verreauxii* and Martial Eagles in South Africa, all of which had been recorded taking lambs. Other examples included pigeon racing enthusiasts versus Peregrine Falcons in Europe, and raptors versus game birds in the UK, where Red Grouse *Lagopus lagopus* shooting interests in the uplands particularly threatened Hen Harrier populations.



351. Other examples of conflicts with raptors comprised conservation interests versus wind farms, agriculture, poultry, rodent control, falconry, and hunters.
352. Conflict resolution encouraged both sides to move away from 'win-lose' outcomes via a 'shared problem' Win-win solutions were ideal but elusive, and compromises and trade-offs were normal.
353. The range of processes needed to map and manage conflicts were complex and included a large element of social science and a wide range of stakeholder processes as well as a certain amount of ecological science.
354. The 'horrendogram' road map for conflict management illustrated in the presentation could be converted into a relatively simplified linear process as follows: Identify stakeholders → Examine scientific evidence (ecological/social impact) → Engage stakeholders in dialogue → Identify and trial solutions (e.g. brood management; diversionary feeding) → Adopt solutions.
355. Looking ahead at opportunities for conflict resolution and management by the Raptors MOU, the first step would be to identify relevant conflicts, and to explore their intensity using conservation conflict curves. Case studies should then be examined where conflict management processes had occurred. The final step would be to encourage the adoption of a road map for conservation conflict management where this approach was appropriate.
356. Dr. Jones remarked that conservationists generally neglected social science, and it was important to remember that the purpose of conflict resolution was to solve problems, not necessarily to make people happy. There were cases when the causes of conflicts were illegal – such as the shooting of raptors on hunting estates in the UK – and this could make it difficult to compromise or meet in the middle.
357. Dr. Jones then reflected on the generational nature of some conflicts. When there were strong cultural and traditional causes of conflicts, it was important to educate the next generation to raise awareness and change attitudes.
358. Prof. Amar addressed the question of how to deal with stakeholders who were breaking the law with an example from Grouse shooting in the UK. The situation had been that conservationists wanted Hen Harriers, but were not getting them, and landowners and hunting interests wanted better publicity but were not getting that. Both parties were losing and when this was recognized, both parties made compromises which reduced the level of illegal killing.
359. Prof. Shobrak raised the question of conflict between bird conservation and airport authorities, which was increasing as airports expanded.
360. Prof. Amar replied that airport authorities were concerned about air safety, and this was a shared problem because conservationists did not want birds to cause air crashes either. The solution was for both parties to examine the scientific evidence base and other case studies and to work together to find solutions. These could include approaches such as reducing prey abundance for raptors or managing the habitats in the vicinity of the airport.



361. Prof. Shobrak then asked Prof. Ferrer about the sex ratios of birds used in reintroduction programmes, noting that releasing a higher number of females had been successful with Peregrine Falcons in Saudi Arabia.
362. Prof. Ferrer replied that it was normal in Spain to release the same numbers of each sex, especially if the reintroduction was isolated from other populations. With Ospreys, only females had been released in two areas. Males of many raptor species were more philopatric than females, and it might be interesting to try releasing more males in certain situations.
363. Mr. Féas asked whether releasing wild-caught birds in preference to captive-bred ones was preferred because of the lower costs, or better results.
364. Prof. Ferrer said that cost was the main consideration, and that it would be of interest to compare results of releases from the two sources.
365. The Chair concluded the discussion, mentioning the role of climate change as an influence in conservation conflicts, and stating a need to think afresh about a range of conservation conflicts across the area covered by the Raptors MOU. He suggested that beyond specialist lines of research, the overarching issues could form the subject of a doctoral research project.

#### 6.8 Development of TAG Work Plan until MOS4

366. Dr. Gallo-Orsi gave a presentation, co-authored by Prof. Thompson, titled “TAG Work Programme 2023-2025” reflecting on the past WP and suggesting, in many cases, new tasks:
367. Tasks under Activity 1 of the MOU *Improvement of legal protection* were core activities that were ongoing.
368. Additional activities suggested under Activity 2 *Protect and/or manage important sites and flyways* were:
- Task 3 – Fact sheets on threats to Annex 1 species;
  - Task 4 – Drafting of a ‘best practice guide’ for reintroduction of Saker Falcon based on success in Bulgaria;
  - Task 5 – Drafting a pilot site network report for all Annex 1 species;
  - Task 6 – Cooperation with the Energy Task Force and the Electrocutation Discussion Group;
  - Task 8 – Cooperation with MIKT, and Arabia, Iran and Iraq IKB initiative;
  - Task 8b – Possible insights from the contribution of Prof. Amar.
369. Additional activities suggested under Activity 3 *Habitat conservation and management* were:
- Task 9 – Consider airspace as habitat;
  - Fill knowledge gaps identified through the African-Eurasian Bird Migration Atlas.
370. Additional activities suggested under Activity 4 *Poisoning* were:
- Task 10 – CMS Lead Task Force;
  - Task 11 – Impact of locust *Locusta migratoria* and quelea *Quelea quelea* control programmes on raptors.

371. Additional activities suggested under Activity 5 *Guidance* were:
- Task 12 – East Africa – Eurasian Flyway Initiative (including definition of monitoring standards, capacity building, awareness raising, sharing data, monitoring populations).
372. Tasks under Activity 6 of the MOU *Reporting* were completed (Task 14 and 16) or core activities that were ongoing (Task 15, 17, 18, 19 and 20).
373. The Chair pointed out that unless TAG members had comments or disagreements with the proposed activities, their agreement would be assumed. He then opened the floor for discussion.
374. Dr. Gallo-Orsi added that a reality check would be carried out and that not all activities would be possible in 2022.
375. Mr. Stroud asked whether it was known what guidance conservation practitioners actually wanted and needed. AEWA had produced significant guidance which it was subsequently found was mostly little used. A clear focus on the audience and their needs was required, and he cautioned against producing 'top down' material that would not be used.
376. Dr. Jones pointed out the difficulty of prioritizing areas for action under Task 6, regarding collisions and electrocution from power lines. BirdLife International had tackled this question in the Mediterranean region, and she offered the results of this work to practitioners under the Raptors MOU if they were considered to be useful.
377. Mr. Botha reiterated Mr. Stroud's recommendation to avoid the top-down approach, and to ensure that guidance was required and would be used. He considered it important that issues mentioned in Prof. Ferrer's presentation were included in guidelines on Reintroduction.
378. With regard to the Energy Task Force, Mr. Botha urged the TAG to consider wider engagement with available expertise and knowledge. A lot of work had been undertaken on this issue across and beyond the range of the MOU, and it would be unfortunate to re-invent the wheel. Guidance was needed to consolidate and improve relevant available information. He concluded by saying that there was room to improve the focus of guidance and other documents produced by the TAG and the MOU, and to market them more effectively.
379. Prof. Galbraith saw a need to increase the effectiveness of the Work Plan, especially in its take-up by governments. He made a second point in his role as the CMS appointed Councillor for Climate Change, pointing out that climate change had an impact on habitats, which in turn impacted biodiversity, including raptors. The impacts of climate change on raptors remained a neglected area of research, and the impacts on their habitats and prey species would be a worthwhile area of study.
380. With regard to Task 7 of the Work Plan, Prof. Ferrer offered his expertise on the impacts of renewable energy infrastructure on raptors. He had considerable experience in identifying appropriate sites for wind and solar systems and mitigating their effects on raptors.

381. Prof. Shobrak pointed out the usefulness of sensitivity mapping as a tool to visualize the probability of threats. It could be effectively used to target hotspots, for example of hunting or electrocution. Solutions such as this were not always provided in Raptors MOU guidelines.
382. Dr. Jones recalled the issue raised by Prof. Shobrak and Mr. Botha concerning identification and application of conservation status at regional level, especially regarding Category 2 species in Table 1 of the Action Plan.
383. She continued by stressing the importance of data from satellite tracking studies in helping to address gaps in the site network and providing evidence of illegal killing and a wider understanding of mortality. She considered it important to cooperate with practitioners in this field, and to give serious consideration to taking this approach forward.
384. Mr. Botha recalled that a range of threats had been considered when drafting the Vultures MsAP. This had been drafted five years previously and was due to be reviewed. In particular, new range-wide assessments were required, together with updated maps. While the drafting of the MsAP had been completed in good time, there was still considerable scope for increasing activities related to implementation.
385. Regarding the former Preventing Poisoning Working Group under CMS, he considered it very unfortunate that this body had become inactive, especially in relation to issues such as locust control. This was an area of concern that should be raised with CMS. The Raptors MOU and the TAG should raise concerns at the highest level.
386. Dr. Gallo-Orsi recalled that the Preventing Poisoning Working Group had become inactive due to a lack of funding, and reassured Mr. Botha that locust control was an issue that would not be forgotten.
387. Mr. Botha supported Dr. Jones's emphasis on the importance of satellite tracking studies and added that the use of drones in current and future studies was also important. It was a readily accessible and inexpensive technology with many potential applications in monitoring and research related to raptors. He added that eBird was a rich source of information on avian numbers and distribution and that there was considerable scope for including eBird data in raptor studies.
388. The Chair thanked TAG members for their input and said that the Work Plan would be refined and updated during the first quarter of 2022 on the basis of comments received in the discussion, and submitted to TAG before MOS.

## 7 Any other business

389. The Chair suggested that intersessional meetings of the TAG could be convened in late February 2022, and possibly also in July or August 2022.

## 8 Adoption of the List of Actions

390. It was agreed that the list of actions would be finalized after the meeting and circulated for adoption in January 2022.

## 9 Closure of the meeting

391. The Chair warmly thanked all the TAG members, representatives of Signatories, Observers, and Invited experts for their valuable inputs to the meeting, and the CMS staff who had provided support. Much had been achieved, and the inputs of Dr. Jones and Mr. Pritchard drafting documents and other outputs behind the scenes had been invaluable.
392. Dr. Gallo-Orsi gave special thanks to Ms. Hinchliffe, who would be leaving the Coordinating Unit and starting another job in the New Year. He thanked her for her incredible support after his appointment and wished her all the best in her new career. The meeting expressed its appreciation with a round of applause.
393. The Chair closed the meeting and wished everybody a relaxing holiday season.

## 10 Annex 1: TAG4 Actions

Paragraph number in TAG4 report	Action
41	1. Coordinating Unit to liaise with Vulture Conservation Foundation and André Botha to agree if a new letter to the Guinea Bissau authorities is needed.
89	2. Coordinating Unit to propose a mechanism / online tool to share updates on relevant projects and conservation actions by TAG members, Signatories, Cooperating Partners, and other stakeholders.
128	
108	3. STF is invited to submit for comment to TAG a draft proposed Work Plan in time for CMS COP14.
135	4. All TAG members to explore possibilities for supporting exchange visits, regional workshops, and other training opportunities of governmental staff within subregions.
208	5. Coordinating Unit to include in MOS3 agenda a discussion on how to promote the development of National Raptor Conservation Strategies.
243	6. All TAG members to inform the Red List team at BirdLife if they feel that the conservation status of any species was not accurately reflected in the latest Red List assessment.
252	7. TAG to discuss and agree on the meaning of 'regional' with regard to the classification of species in Category 2 in Table 1 of Annex 3.
292	8. Coordinating Unit to include in MOS3 agenda the results of the Site Network Analysis.
301	9. Dr. Jones is invited to publish, as member of the TAG, in a peer-reviewed scientific journal, the Site Network Analysis incorporating the issues raised in the discussion at TAG4.
321	10. TAG to agree on the content of the Conservation Status Assessment Report and how to develop a system to monitor the implementation of the AP and the impact on the species covered by the MOU, building on the experience of AEWA and other CMS-family instruments, and to make a proposal to MOS3.
381	11. TAG members are encouraged to represent TAG at the CMS Energy Task Force and to take a more active role in it.
388	12. TAG to raise awareness on the extent and impact of Poisoning on Raptors.
389	13. Coordinating Unit to circulate a draft WP by end of February 2022 for TAG members to finalize by end of March.
391	14. TAG to meet by the end of March and possibly later in the year in preparations of MOS.

## 11 Annex 2: Agenda of the fourth meeting of the Technical Advisory Group to the Raptors MOU

1. Welcome and introductions
2. Adoption of the Agenda
3. Updates since the Third Meeting of TAG
  - 3.1. Review of Actions from the Third Meeting of TAG
  - 3.2. Report from the Coordinating Unit
  - 3.3. Report from the CMS Secretariat
  - 3.4. Updates from TAG members
  - 3.5. Report on implementation of the SakerGAP
  - 3.6. Report on implementation of the Vulture MsAP
4. Raptor Conservation Strategies
5. Review of TAG Membership
6. TAG Work Plan
  - 6.1. Review of the TAG Work Plan (2016-2020)
  - 6.2. Amendments to the MOU
    - 6.2.1. MOU Text changes
    - 6.2.2. Amendments to the Action Plan and Table 2
    - 6.2.3. Changes to the species list
    - 6.2.4. List of important sites for migratory birds of prey
  - 6.3. Raptor Safe Zones
  - 6.4. Pilot Site Network Analysis
  - 6.5. Conservation Status Assessment Report
  - 6.6. National and Cooperating Partner Reporting
  - 6.7. Horizon scanning and emerging issues
  - 6.8. Development of the TAG Work Plan until MOS4
7. Any other business
8. Adoption of the List of Actions
9. Closure of the meeting

## 12 Annex 3: List of Participants

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