Convention on the Conservation of Migratory Species of Wild Animals
Secretariat provided by the United Nations Environment Programme

16TH MEETING OF THE CMS SCIENTIFIC COUNCIL

Bonn, Germany, 28-30 June, 2010

UNEP/CMS/ScC16/Inf.15
Agenda Item 6.0

NOTE ON THE POTENTIAL ROLE OF CRITICAL SITES AND ECOLOGICAL NETWORKS WITHIN THE CMS FRAMEWORK

(Prepared by the CMS Secretariat)

1. During the 16th Meeting of the CMS Scientific Council the Dutch delegation will make a presentation on ecological networks and its potential role within the framework of the Convention on Migratory Species. This document is meant to support the subsequent discussion.

Background

2. Habitat destruction and fragmentation are among the primary threats to migratory species. The identification and conservation of habitats, in particular the critical sites and connecting corridors (where appropriate, e.g. terrestrial mammals), are thus of critical importance for the conservation of these species.

3. Ecological connectivity can have multiple advantages, such as maintenance of viable populations and migratory pathways, reduced risk of population extinction and higher resilience to climate change. In the case of birds, networks of "stepping stone" habitat should cover entire flyways to be effective.

4. Ecological networks usually include core areas and corridors, and sometimes also nature restoration areas and buffer zones. Such critical site networks are particularly relevant in the context of acute habitat fragmentation, which is being observed on a global scale.

5. Existing initiatives for ecological networks exist both at national and international levels. Both are relevant and can support transboundary migration. International initiatives usually concentrate on sites of international importance (e.g. the Ramsar Convention). While it is important to be aware of the limitations of the protected area approach, research has shown that protected areas can be a highly effective tool for biodiversity conservation.

6. The Convention on Biological Diversity (CBD) addresses this issue through its Programme of Work on Protected Areas and IUCN through its Commission on Protected Areas. Networks of protected areas are a corner stone of the Ramsar Convention, the EU Habitats and Birds directives, the Bern Convention and, though not yet implemented as such, in AEWA. These 'networks' are, however not always networks of physically connected sites but rather 'archipelagoes of isolated sites'. They may be interconnected by areas under national or regional protection or a biodiversity-rich countryside. For migratory birds such 'stepping stones' can be

effective and it is worth noting that the coverage of critical sites for migratory water birds is rather good. The Wings Over Wetlands project and other research has shown however that the results are still insufficient and further attention to the matter is urgently required.

7. A more ambitious step is to establish networks of critical sites in order to achieve connectivity among them and to protect migratory species along their entire migration route. Rivers, mountain ranges and coastlines are examples of natural corridors that migratory species use as points of reference during their journeys. However, in any habitat corridors can occur and it is important that the nature of the corridors meets the requirements of the species that need these connections. Forests, for example, should be connected to forest habitats, grasslands to grasslands and so forth. This also applies to wetlands but in the case of migratory birds stepping stones along flyways will often be sufficient.

8. The designation of protected areas across very large areas is not always possible. Additional wider countryside measures usually need to be applied. Since many species are widely dispersed across their breeding and non-breeding ranges, it is essential to address and mitigate the anthropogenic changes at the wider landscape scale.

9. The practical approach to the identification, designation, protection and management of critical sites will vary from one taxonomic group to another, or even from species to species. The requirements of fish, insects, birds, marine turtles, terrestrial mammals and marine mammals are quite different. The work on birds is well advanced, and the flyway approach provides a useful framework to address habitat conservation and species protection along migration routes. The work of AEWA and the Flyways Working Group of the CMS Scientific Council therefore fit well in an ecological network approach.

10. The Serengeti-Mara Ecosystem in Kenya and Tanzania is an example of a migration corridor for terrestrial mammals in Africa. In Kenya the area is protected through inclusion in the Masai Mara National Reserve and in Tanzania by the Serengeti National Park. There are many other examples throughout the continent where populations of wildebeest, antelopes, elephants, zebras and other terrestrial mammals regularly migrate between their dry and wet season ranges or between high and low elevations. The migration of White eared kob between Ethiopia and Sudan is one of the greatest animal movements in Africa and protecting this process is one of the most difficult conservation challenges that conservationists have to face. Habitat protection and international cooperation are essential to achieve this goal.

11. In Europe there are several national ecological networks with a high degree of connection of protected areas in theory, however, these connections often only exist on maps only.

Potential role of ecological networks within the CMS framework

12. In its implementation CMS so far focuses on species rather than habitat conservation, but it is worth noting that the Convention text makes specific reference to habitat conservation:

13. Article III.4 (Appendix I species):

Parties that are Range States of a migratory species listed in Appendix I shall endeavour:

a) to **conserve** and, where feasible and appropriate, **restore** those **habitats** of the species which are of importance in removing the species from danger of extinction.

b) To **prevent**, **remove**, compensate for or minimize, as appropriate, the adverse effects of activities or **obstacles** that seriously impede or prevent the migration of the species

14. Article V.5 (V: Guidelines for AGREEMENTS)

a) **conservation** and, where required and feasible, restoration of the **habitats** of importance...

b) …maintenance of a **network** of suitable habitats appropriately disposed in relation to the migration routes.

c) **elimination**… or compensation for activities and **obstacles** which hinder or impede migration.

15. The Convention also assigns a role to the Scientific Council in relation to habitat conservation. The relevant article VIII.5 reads:

> The functions of the Scientific Council may include recommending to the COP solutions to problems relating to the scientific aspects of the implementation of the Convention, in particular with regard to the habitats of migratory species.

16. Some CMS instruments have already undertaken work contributing to the implementation of the mandates listed above. The AEWA Strategic Plan 2009-2017, for example, includes the setting up of a 'comprehensive and coherent flyway network of protected and managed sites and other adequately managed sites, of international and national importance for waterbirds….taking into account existing networks and climate change. The recently developed Critical Site Network (CSN) Tool by a partnership of AEWA, Ramsar, Wetlands International and Birdlife International is a very useful instrument. It is a state-of-the-art webportal for flyway-level information on waterbirds and the sites they use in the African-Eurasian region, to underpin planning and management at site level.

17. Other examples include:

- IOSEA is working on a network of critical sites for marine turtles in the region, largely focussing on the nesting beaches that are essential for the reproduction of these species.
- EUROBATS has published a report on protecting and managing underground sites for bats, including a conservation code and practical recommendations for site protection and management.
- The CMS-Birds of Prey Memorandum of Understanding (Raptor MoU) has a similar provision on a habitat network as AEWA has.

18. With this in mind the Scientific Council is invited to discuss possibilities for site conservation and ecological networks in the framework of CMS, building on and in synergy with similar work by other instruments (e.g. Ramsar, EU), with the aim of proposing a Resolution for further work on the initiative to be presented to CMS COP10 in 2011.

19. CMS could apply the network approach in a number of ways, as listed below. It is noteworthy that all of these activities are dependent on close cooperation and the input of the respective range states, in the first instance by CMS Parties and Signatories of daughter agreements.

- General policies on habitat conservation and ecological networks for migratory species;

- Inclusion of the network approach in the implementation of existing CMS initiatives such as, the West African Elephant MoU, the Gorilla Agreement, the Sahelo-Saharan Antelopes Action Plan, the Saiga antelope MoU, the Bukhara deer MoU and – as is already the case - in the work on flyways;

- Integration of the network approach in new initiatives for migrating mammals and where appropriate also to other taxonomic groups;

- Identification of the most important sites and corridors for selected cases, starting with existing CMS instruments and instruments under development, building on and in synergy with existing initiatives (national protected areas systems; other MEAs[1]);

- Production of guidelines for the integration of the network concept into conservation policies for the species covered by CMS and its daughter agreements;

- Promoting the designation of protected areas as critical sites, assessing the contribution of relevant protected areas in climate change mitigation and enhancing synergies with the LifeWeb initiative of the CBD;

- Promoting habitat restoration at key sites.

1 Multilateral Environmental Agreements