



*GUIDELINES ON THE INTEGRATION OF MIGRATORY SPECIES INTO
NATIONAL BIODIVERSITY STRATEGIES AND ACTION PLANS
(NBSAPs)*

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Preface

The Convention on Biological Diversity (CBD) requires all Parties to develop a National Biodiversity Strategy and Action Plan (NBSAP), and has established that NBSAPs are the key mechanisms for national implementation. CBD, CMS, as well as the other global Multilateral Environmental Agreements have agreed that NBSAPs are tools for implementation of not only CBD, but the whole cluster of biodiversity-related conventions.

The 10th Conference of the Parties to the Convention on Biological Diversity (COP10), held in Nagoya, Japan in 2010 adopted the 20 Aichi Targets for Biodiversity (see Box 4), including Target 17, which states that countries should have developed adopted and commenced implementation of revised NBSAPs by 2015. This provides a unique opportunity for countries to ensure coherent implementation of CBD and CMS and for conservation of migratory species to be effectively incorporated and mainstreamed into national policies for biodiversity, including into new national targets.

This publication seeks to assist CMS Parties in this endeavour. It provides a set of guidelines, mainly directed to CMS Family Focal Points, on how they could best become involved and influence the coming processes of revising and updating NBSAPs. The guidelines, however, are also targeted at competent authorities of non-Parties, CBD focal points and other stakeholders in the NBSAP processes to raise awareness about migratory species and their importance for biodiversity and ecosystem functioning.

In addition, the publication provides an overview of the latest developments in the CBD with relevance to CMS, obligations, measures set up by the CMS and its associated instruments. Finally, it includes an assessment of existing NBSAPs and the extent to which they reflect migratory species concerns.

1. Why integrate migratory species into NBSAPs?

Strategies and actions to conserve and sustainably use migratory species in accordance with CMS require policy planning by each country to obtain the necessary political support and financial resources. Unlike CBD, CMS does not provide for a national mechanism for implementation, and since migratory species concerns cannot, and should not be seen separately from the broader issue of conservation and sustainable use of biodiversity, there are good reasons for integrating national strategies and actions for CMS implementation into the CBD implementation mechanism, NBSAPs.

In general, this integration did not take place in the first generation of NBSAPs. The adoption of Aichi Target 17 at CBD COP10, which plans to have a new generation of revised and updated NBSAPs in place by 2015, provides a possibility to rectify this situation.

Biodiversity, its value for human well-being by underpinning ecosystem services, and the consequences of biodiversity decline, are receiving increased political attention. This was clearly demonstrated at the CBD COP10 in Nagoya, Japan by the presence of approximately 130 ministers. By offering them more visibility in the new generation of NBSAPs, migratory species and CMS may also become more visible at the political level.

Conversely, more focus on migratory species in NBSAPs may generate more attention to biodiversity issues in general, through the attraction and fascination many people often have for migratory species. Migratory species could serve as leverage for conservation and sustainable use of biodiversity and act as important biodiversity indicators.

Integration of CMS concerns into NBSAPs would also enhance the ability of countries to use existing financial resources, and most importantly those available under the GEF more effectively. Resources have been allocated by the GEF to assist developing countries and countries with economies in transition to prepare new NBSAPs, and GEF funds will be available for activities to implement NBSAPs.

From a CBD perspective, CMS offers a valuable approach to global biodiversity that so far has received limited attention by the CBD, [the Migratory Range Approach](#)¹. CBD and NBSAPs have largely been regarded as framework for national action, and CBD has applied [the Ecosystem Approach](#) as its main approach. With migratory species integration national biodiversity planning would need to have a more international perspective and be coordinated with Range States, all of which are also CBD Parties. The migratory range approach combines features from the ecosystem and species-related approaches, and reflects that threats in one Range State can negatively impact a migratory species throughout its entire range.

BOX 1

Recent CBD COP Guidance on NBSAPs: CBD Decision IX/8 paragraph 8

COP "...urges Parties in developing, implementing and revising their national and, where appropriate, regional, biodiversity strategies and action plans, and equivalent instruments, in implementing the three objectives of the Convention, to:

Meeting the three objectives of the Convention:

- a) Ensure that **NBSAPs are action-driven, practical and prioritized**, and provide an effective and up-to-date national framework for the implementation of the Convention
- b) Ensure that NBSAPs take into account the **principles in the Rio Declaration** on Environment and Development
- c) Emphasize the **integration of the three objectives of the Convention into relevant sectoral or cross-sectoral plans**, programmes and policies
- d) Promote the **mainstreaming of gender considerations**
- e) Promote synergy between activities to implement the Convention and **poverty eradication**
- f) Identify **priority actions at national or regional level, including strategic actions** to achieve the three objectives of the Convention
- g) Develop a **resource mobilization plan** in support of priority activities

Components of biodiversity strategies and action plans:

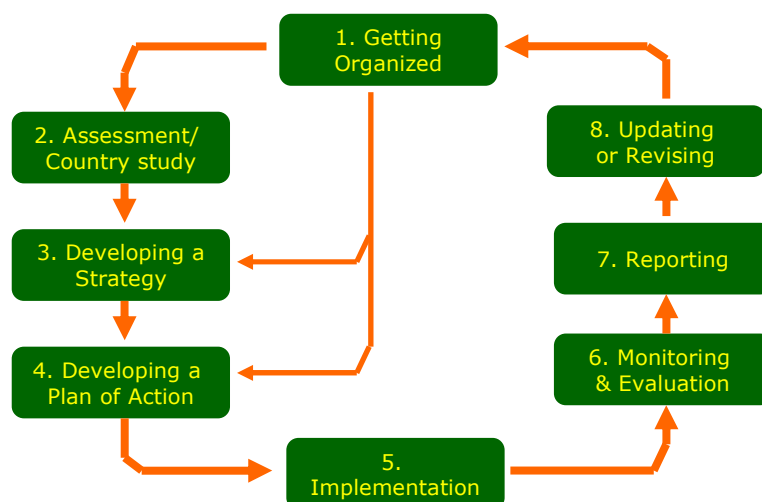
- h) Take into account the **ecosystem approach**
- i) Highlight the **contribution of biodiversity and ecosystem services**, to poverty eradication, national development and human well-being, as well as the economic, social, cultural and other values of biodiversity
- j) Identify the **main threats to biodiversity**, including direct and indirect drivers of biodiversity change, and **include actions for addressing the identified threats**
- k) As appropriate, **establish national, or where applicable, sub-national, targets** to support the implementation of NBSAPs

Support processes:

- l) Include and implement **national capacity-development plans** for the implementation of NBSAPs, making use of the outcomes of national capacity self-assessments
- m) Engage **indigenous and local communities, and all relevant sectors and stakeholders**
- n) Respect, preserve, and maintain **traditional knowledge**, innovations and practices
- o) Establish or strengthen **national institutional arrangements** for the promotion, coordination, and monitoring of the implementation of the NBSAPs
- p) Develop and implement a **communication strategy** for the national biodiversity strategy and action plan
- q) Address **existing planning processes in order to mainstream biodiversity** concerns in other national strategies, including, in particular, poverty eradication strategies, national strategies for the Millennium Development Goals, sustainable development strategies, and strategies to adapt to climate change and combat desertification, and sectoral strategies. Ensure that NBSAPs are implemented in coordination with these other strategies
- r) Make use of, or develop as appropriate, **regional, sub-regional or sub-national networks** to support implementation of the Convention
- s) Promote and support **local action for the implementation of NBSAPs"**

Note: This is an abbreviated version of the decision. The complete text can be accessed at www.cbd.int/nbsap/guidance.shtml

Steps in the Biodiversity Planning Process



Source: Miller, K.R. & Lanou, S.M. 1995, National Biodiversity Planning: Guidelines Based on Early Experiences around the World, World Resources Institute, United Nations Environment Programme and The World Conservation Union, Washington DC, Nairobi, Gland, Switzerland.

2. Guidelines on the integration of migratory species concerns into the revision and updating of CBD National Biodiversity Strategies and Action Plans (NBSAPs).

The following provides some measures that national CMS focal points and focal points of CMS Agreements and MOU's could take, depending on national circumstances and, if they have not done so already, to ensure that migratory species concerns will be reflected in the revised and updated NBSAPs².

Process

1) Establish contact and collaboration with the national CBD and the other biodiversity related conventions focal points

This is a fundamental prerequisite for active involvement of the CMS focal point in NBSAP preparation. Only 22 countries have the same focal points for CBD and CMS, and in many countries the two focal points are based in different institutions, suggesting that daily collaboration has been so far limited. (See box 3).

The other biodiversity-related conventions share the interest of CMS to have their issues integrated in the NBSAPs; therefore, the NBSAP process may be an opportunity to establish closer national collaboration between the focal points of all these conventions. Contact details for the focal points of CMS, CBD, Ramsar and CITES are available on the CMS website: www.cms.int/about/nbsap/national_focal_points.pdf.

2) Become familiar with CBD decisions, work programmes, targets etc. and their relevance for CMS

To a varying degree, and depending on national circumstances, a wide range of CBD decisions including a large number of the Aichi Targets (See box 4) are very relevant to migratory species. The CMS focal point should explore them and identify which are most relevant for the country to fully capture coherence, synergy and cost-effectiveness in implementation.

The survey could be facilitated by making use of the TEMATEA project created by UNEP and IUCN. TEMATEA provides issue-based modules for coherent implementation of the biodiversity-related conventions. The modules structure information on common issues by identifying and grouping relevant articles, decisions, resolutions and recommendations of different agreements. So far, modules for inland waters, invasive alien species, sustainable use, biodiversity & climate change, protected areas, and access to genetic resources & benefit sharing have been developed.

TEMATEA was developed in response to the major challenge with which countries are faced in implementing the numerous obligations resulting from the biodiversity-related conventions, not least because of limited financial and human resources (see www.tematea.org).

The CMS focal point should also become familiar with the existing NBSAP.

3) Create a separate CMS planning process to identify and feed CMS priorities into the NBSAP process

The national CMS family focal points and other CMS stakeholders should establish a process among themselves to define CMS priorities across the agreements and relevant MOU's to be brought into the NBSAP process. The process should consider how CMS tools could best contribute to achieving the overall 2020 target for biodiversity and the 20 accompanying Aichi Targets. This would typically include targeted action to mitigate the main threats for migratory species with an unfavourable conservation status and defining needs for enhanced cooperation with other Range States, e.g. through signing of new agreements and MoUs.

The CMS inputs that could be relevant for the NBSAP process are included in many of the following guidelines.

4) Promote coherent integration of migratory species in Range States' NBSAPs

The unique characteristic of migratory species is that their protection requires cooperation across borders to be effective. Concerted and coordinated action among Range States is also needed when it comes to reflecting concerns about migratory species in NBSAPs in a coherent way. This could be a relevant issue to address at the earliest opportunity in the governing bodies of the various CMS agreements and MoUs with the aim of identifying specific actions needed for the particular species that could be brought into all Range States' NBSAPs.

Far from all species listed in CMS Appendix II are currently subject of Range State agreements. The NBSAP process could also be a useful opportunity to consider and discuss with other Range States the need to conclude new agreements, MoU's or other types of coordinated action for specific migratory species, and to reflect such needs in the NBSAPs.

5) Become fully involved in the NBSAP process

The preparation of the NBSAP is meant to be a fully participatory process involving both governmental and non-governmental stakeholders. The process should be bottom-up, while at the same time be "owned" at a high political level.

The process is essential for ensuring that the stakeholders – including the economic sectors, in which the root causes of biodiversity loss lie – feel commitment to and ownership of the CBD. The limited success of affecting the main drivers of biodiversity loss in the first generation of NBSAPs was to a large extent due to weaknesses in the preparatory processes.

Besides promoting the integration of CMS-specific issues, the CMS focal points should work generally for NBSAPs to be as comprehensive and robust as possible. In line with the CBD guidelines for NBSAPs, this would include provisions for mainstreaming across sectors, time-bound and measurable targets, prioritization amongst actions, mechanisms for monitoring and review and strategies for communication and financing.

The CMS focal point could also promote the participation of NGOs and scientific institutions with a specific focus on and knowledge of migratory species in the process.

6) Provide basic information on migratory species for which the country is a Range State to the NBSAP process

This includes species listed on the CMS Appendices for which the country is a Range State, and information on international agreements and MOUs under the CMS in which the country is taking part.

7) Promote enhanced monitoring of and research into migratory species

Lack of knowledge about the status and trends of biodiversity was highlighted as a major constraint to combat biodiversity loss in the first generation of NBSAPs. Hence, in a large number of NBSAPs, improvement of the knowledge base figures as one of the key objectives. Although the NBSAPs have helped generating better information, the base is still incomplete, and it is likely that the coming NBSAPs will again address the gaps and include provisions for filling them. This could be an opportunity for the promotion of enhanced monitoring and research of migratory species, thereby meeting the requirements of all CMS instruments. This may contribute not only to knowledge about the particular species, but may also provide an indication of the status of the biodiversity upon which it depends. (See below on migratory species as potential biodiversity indicators). It would also contribute to meeting Aichi Target 19.

8) Promote targets and indicators for migratory species

The CBD Strategic Plan 2011–2020 calls on Parties to develop national targets using the Aichi Targets as a flexible framework and integrate them into the NBSAPs. Such targets could also address migratory species.

To monitor and review implementation of the NBSAP, a set of national indicators should be developed. Acting as links between different ecosystems and providers of ecosystem functions such as pollination, seed distribution and food for other animals, migratory species are very suitable indicators for biodiversity and ecosystem health.

9) Promote the establishment of protected areas networks as beneficial for migratory species

Protected areas are cornerstones for conservation of biodiversity in general and specifically migratory species. Protected areas figured prominently in the first generation of NBSAPs and are likely to do it also in the second in response to the Aichi Target 11, which aims to have at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas conserved by 2020.

The CMS focal point should provide information to the NBSAP process on habitat, hotspots, and migratory pathways in special need of protection. Such information should be shared and coordinated with other Range States, thereby contributing to building up networks of protected areas for migratory species habitats across the range. For species such as terrestrial mammals, the Range States will often be neighbouring countries where enhanced cooperation could lead to the establishment of trans-boundary protected areas.

Protected areas at sea are highly underrepresented compared to on land, and a substantial increase of such areas – including strict measures against harmful activities in the areas - would be highly important for the conservation status of many marine migratory species.

10) Promote restoration of habitats for migratory species

Both CBD and CMS address the issue of nature restoration, but the subsidiary bodies of both conventions have paid limited attention to the issue, and it is largely absent from first generation NBSAPs.

Aichi Target 15 calls on Parties to restore at least 15 per cent of degraded ecosystems by 2020, and the coming CBD COP11 in 2012 will address the issue of ecosystem restoration. It is thus likely that restoration will receive more attention in the coming NBSAPs. CMS focal points could push for this by providing information and recommendations on degraded habitats for migratory species in need of restoration.

11) Promote provisions for sustainable use of migratory species in NBSAPs

Being one of three objectives, the issue of sustainable use is of high relevance to the CBD. COP 7 of the CBD adopted the Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity, a set of fourteen practical principles and operational guidelines designed to ensure and enhance the sustainable use of the components of biodiversity³.

Although not explicitly covered by CMS, the notion of sustainable use is also highly important to the CMS and to the protection of migratory species. Many species are listed on the CMS Appendixes mainly because they are subject to unsustainable use in some way. Through addressing and applying rather strict measures on the taking of migratory species in CMS Article III and V and in CMS instruments, the issue of sustainable use and the thinking behind the Addis Ababa Principles are to some degree embodied implicitly in CMS and related instruments.

As a contribution to the NBSAP process, CMS focal points could review the Addis Ababa Guidelines against the national measures to implement CMS and relevant CMS instruments in order to determine the need for more specific national measures on the sustainable use of migratory species.

12) Promote integration of migratory species in Environmental Impact Assessment (EIA) and Strategic Environmental Assessment (SEA)

Impact assessment is an important instrument for the practical mainstreaming of biodiversity and its components across projects, programmes and policies. This is recognized by both CBD

(Article 14) and implicitly by CMS Article III.4, which prevents the adverse effects of activities for Annex 1 species.

CBD adopted a set of guiding principles at COP6 in 2002 (updated at COP8 in 2008) for incorporating biodiversity into EIA and SEA.⁴ Also in 2002, CMS COP7 addressed the issue and urged Parties to include in EIA and SEA, wherever relevant, as complete a consideration as possible of effects involving impediments to migration. Parties were also urged to make use of the CBD guidelines.⁵

Environmental Impact Assessment is a process of evaluating the likely environmental impacts of a proposed project, taking into account all aspects and then using the conclusions as a tool in planning and decision-making. EIA is now widely incorporated into national legislation and applied throughout the world although the practical applications may vary.

Strategic Environmental Assessment is a process to evaluate the environmental consequences of public plans, policies and programmes in order to ensure that they are fully included on a par with economic and social considerations. SEA is not nearly as widely applied as EIA, in spite of its obvious potential for mainstreaming biodiversity across sectors.

The CMS focal point could review national procedures for EIA and SEA and their applicability to migratory species and feed in proposals for improvements to the NBSAP process, if needed.

13) Promote outreach and communication activities related to migratory species

CMS COP 8 endorsed a CMS Outreach and Communication Plan 2009 – 11⁶, and NBSAPs may be a useful instrument at the national level to raise public awareness about migratory species and their importance for ecosystem functioning thereby also contributing to Aichi Target 1. As indicated above, higher public awareness about migratory species and their functions may potentially raise awareness on broader issues of biodiversity through migratory species' potential as biodiversity indicators and through the attraction and fascination many people have for them..

14) Explore the value of migratory species and the potential to create incentives for the conservation and sustainable use

Aichi Target 2 states that the values of biodiversity by 2010 should be integrated into national and local strategies for development and poverty reduction and planning processes, and incorporated into national accounts and, as appropriate, reporting systems. Target 3 deals with removing harmful incentives for biodiversity and developing positive ones by 2010.

The two targets are closely related since valuation often will be a prerequisite for the removal of harmful and the creation of positive incentives.

The valuation and creation of economic instruments could make use of the findings of the study “The Economics of Ecosystems and Biodiversity” (TEEB). This was a major international study launched in different steps leading up to CBD COP10 in 2010. Its aim was to draw attention to the global economic benefits of biodiversity, highlight the growing cost of biodiversity loss and ecosystem degradation, and draw together expertise from the fields of science, economics and policy to enable practical actions for moving forward.⁷

The TEEB study notes that the cost of biodiversity loss is felt on the ground, but can go unnoticed at national and international levels because the true value of natural capital is missing from decisions, indicators, accounting systems and prices in the market. The lack of market prices for ecosystem services and biodiversity means that the benefits we derive from these goods (often public in nature) are usually neglected or undervalued in decision-making. This in turn leads to actions that not only result in biodiversity loss, but also impact human well-being.

Making the benefits of biodiversity and ecosystem services, including the value of migratory species, visible to economies and society is thus necessary to pave the way for more efficient policy responses. CMS focal points should ensure that national valuation processes in preparation of NBSAPs incorporate the value of migratory species, for example, their contribution to wetlands ecosystem services, as pollinators and as generating revenues through animal watching and tourism.

15) Promote the preservation of local communities and indigenous peoples’ traditional knowledge, innovations and practices related to migratory species

Traditional knowledge of indigenous and local communities related to biodiversity and customary use of biological resources are important topics of the CBD dealt with in Articles 8(j) and 10 (c) and by Aichi Target 18.

Migratory species have a great significance in many cultures, including cultures of indigenous and local communities. Hence, a great deal of important traditional knowledge, innovations and practices related to the conservation and sustainable use of migratory species exist that should be preserved, as also reflected in decisions of a number of CMS instruments.

16) Resource mobilization

Only a minority of existing NBSAPs include strategies to finance their implementation, and this, in combination with the widespread lack of endorsement of NBSAPs at a higher government level, has led to poor mobilization of resources and consequently poor implementation of NBSAPs.

According to Aichi target 20, the mobilization of resources from all sources should increase substantially from the current levels by 2020. It is thus expected that the revised and updated

NBSAPs will include financial strategies including strategies for efforts to conserve and sustainably use migratory species. Since such efforts will often be concerted and/or coordinated between Range States, it would be advisable to identify the financial needs and sources between Range States, including through the existing CMS instruments. In cases where migratory ranges cover both developed and developing countries, arrangements for financial support from developed to developing Range States could be made.

Addressing threats to migratory species

17) Climate change

Climate change has become a major driver of biodiversity loss, but most NBSAPs do not address the relationship between climate and biodiversity. Perhaps this can be explained by the fact that most NBSAPs were prepared at a time where the links between climate change and biodiversity received much less attention than today, and possibly also because the majority of countries, developing countries, are only in a few cases major contributors to climate change.

According to Aichi Target 10, anthropogenic pressures on coral reefs and other vulnerable ecosystems impacted by climate change or ocean acidification are minimised by 2015. It is likely that climate change particularly will receive more attention in the revised and updated NBSAPs.

Migratory species are seriously affected by climate change. The effects vary across the different taxonomic groups from changes in migratory range, barriers to migration, changes in prey distribution, lower fecundity, diseases and changing of the gender ratio (turtles). It is estimated that 84 per cent of bird species listed on the CMS appendices face some kind of threat from climate change, almost half because of changes in the water regime.⁸

CMS has taken the issue very seriously, and both COP8 in 2005 and COP9 in 2008 passed resolutions on the impact of climate change on migratory species.⁹ The latter resolution:

- Urges Parties to identify which migratory species are most likely to be directly or indirectly threatened or impacted by climate change
- Recommends that Parties design and implement adaptation strategies for migratory species threatened by climate change
- Urges Parties to promote capacity building to implement conservation action on migratory species threatened by climate change.

These national actions could be relevant to bring into the NBSAP processes.

18) Invasive alien species

Alien invasive species and the threats they cause to ecosystems and native species are explicitly addressed by the CBD, CMS and many of the instruments under CMS, which commit countries to take measures to prevent and mitigate their threats.

Aichi Target 9 requires countries to identify, prioritize, control and eradicate invasive alien species by 2020 and to manage pathways to prevent their introduction and establishment.

Threats to migratory species from invasive alien species are numerous and include competition with native species, harmful impacts on habitats, predation of individuals and eggs, hybridization with the native species and diseases by pathogens and parasites.

First generation NBSAPs have limited coverage of invasive alien species. CMS focal points should seek to ensure that this is not the case for the revised and updated NBSAPs, and that the specific threats to migratory species are properly addressed.

19) Threats caused by economic sector activities

The mainstreaming of biodiversity across sectors lies at the heart of implementing CBD. The comprehensive character of the Convention and its wide scope imply that it can only be implemented through the involvement of all sectors of society. The provisions of Articles 6(b) and 10 explicitly spell out the importance of mainstreaming and a number of the Aichi Targets explicitly or implicitly address sectoral integration, including targets 2, 3, 4 6 and 7.

NBSAPs are envisaged to be a tool for mainstreaming at the national level, but, first generation NBSAPs managed to influence policy only to a limited extent beyond the remit of the national agency directly responsible for biodiversity. Hence, increased involvement of the sectors and attention to sectoral activities harmful to biodiversity are likely to become important issues in the updated and revised NBSAPs.

This could be of great benefit in relation to creating more awareness about threats to migratory species, since many of these threats are indeed linked to activities by the economic sectors. It is therefore important for the CMS focal points to promote sector integration in the NBSAPs and to get fully involved in the dialogues with the different sector authorities to provide relevant information and ensure that migratory species threats caused by sectoral activities will be properly addressed.

Some of the most important sectors and associated threatening activities are outlined below:

Forestry

Forests are habitats of many migratory species listed on the CMS appendices and/or covered by CMS instruments such as songbirds, raptors, bats, the Gorilla and the African Elephant. Consequently, they are adversely affected by excessive logging and other types of unsustainable forest management.

Sustainable forestry is covered by Aichi Target 7.

Agriculture

Migratory species such as Andean Flamingos and other waterbirds, songbirds and bats are threatened by a number of agricultural practices, including conversion of land, draining of wetlands for agriculture, overgrazing, fencing, pesticides and nutrient pollution of wetlands from discharge of fertilizers and manure. Moreover, migratory species are often treated as pests because they feed on crops. On the other hand, less intensive agricultural practices in many cases sustain migratory species populations.

Sustainable agriculture is covered by Aichi Target 7 and reduced pollution, including from excess nutrients, is covered by Target 8.

Fisheries

By-catch of non-target species in fisheries is a major threat to marine migratory species such as cetaceans, seals, turtles, albatrosses and non-target migratory fish. Thus, resolutions on by-catch have been passed by a number of CMS COPs¹⁰, and by-catch is a major issue for many of the CMS instruments dealing with marine species. Overfishing is another serious threat to migratory fish.

The fishery sector received limited attention in the first round of NBSAPs, but the continued decline of listed migratory species caused by by-catch, thereby also affecting how whole marine ecosystems function, is in itself a good reason for bringing more attention to fishery practices in the updated and revised NBSAPs. In line with the CMS COP resolutions, NBSAPs should promote fishing methods and gear to prevent by-catch and to provide for urgently raising the issue in relevant international and regional organizations, such as the regional fisheries management organisations (RFMOs).

Sustainable fishery is covered by Aichi target 6.

Shipping

The shipping sector is generally not addressed in today's NBSAPs, but would be relevant to address in the ones to come because of the threats caused by activities of this sector to marine migratory species.

Cetaceans are highly dependent on sound as their principal sense and therefore are very sensitive to noise from ships, leading sometimes to mortalities and strandings.

Oil spills from ships may - as a large number of spills in recent years have sadly demonstrated - have disastrous impacts on migratory species, by both killing individual animals and polluting their habitats.

Because of the international character of the shipping industry, measures in the NBSAPs could include addressing shipping-induced threats to migratory species and biodiversity in general in the International Maritime Organization (IMO).

Energy

The energy sector is another sector with impact on migratory species largely missing from NBSAPs. Power generation by wind turbines is increasing rapidly in many places in the world with actual and potential risks to migratory birds through collision, disturbance and loss of land. Cetaceans are affected by noise from the coastal and marine turbines. Hence, NBSAPs could provide for careful planning of the location of wind turbines, including through Environmental Impact Assessments on the effects of migratory species. The same

applies to solar power and hydro power plants which may also have potential harmful impacts on migratory species.

Migratory birds colliding with and being electrocuted by transmission lines is another threat that could be relevant to address in NBSAPs.

The concern over greenhouse gas emissions from fossil fuels and the need for energy security has led to dramatically increased bio-fuel production. This again has led to conversion of biologically rich areas and habitats for migratory species like woodlands, wetlands and grassland into monocultures for growing plants such as oil palms, sugar cane and soy. Thus, land use for bio-fuel production should also be subject of careful environmental impact assessment.

Health

The outbreak of Avian Influenza in 2005 and the serious effect it had on domesticated birds taught us some lessons on how to prevent the spread of the disease by wild migratory birds, lessons that could be brought into the NBSAP processes. The main lessons include that wild birds should have plentiful natural habitats, that these habitats, to the extent possible, should be separated from poultry farms to reduce the risks of contamination, and that effluents from poultry farms must not pollute natural habitats.

Some diseases affect human and migratory species alike. Gorillas are affected by the Ebola Virus, which, through the bush meat trade, can spread to humans.

Hunting

Hunting is an important activity in relation to migratory species, being both a serious threat and a possible way of creating incentives to conserve migratory species. The NBSAP processes could be an opportunity to review hunting regulations for migratory species and the capacity to enforce these regulations. It could also be an opportunity to promote sustainable hunting of certain species and populations to create further revenues for conservation measures.

Tourism

Tourism is another industry with actual and potential risks, but possible benefits for migratory species. Nature based tourism is increasing rapidly, and many of the species listed in CMS are major attractions. This poses risks of disturbance and habitat degradation by tourists and tourist infrastructure. However, if carefully planned and managed and compatible with the needs of the species and their habitats and through involving local communities, tourism could prove to be a real win-win situation for conservation and social and economic development.

Waste management

Marine debris has been shown to have a severely adverse impact on a substantial number of marine migratory species including birds, turtles and mammals. Mortality may occur through ingestion, entanglement or by encountering marine debris in marine and coastal areas. Measures at the national level to be reflected in NBSAPs could include the encouragement of domestic industries to reduce marine waste by implementing waste management systems and to develop national action plans to address the negative impacts of marine debris in the countries' Exclusive Economic Zones.

BOX 3

Focal points of CBD and CMS

An assessment of CMS Parties' NBSAPs made for this publication has revealed that migratory species and CMS have generally received very limited attention in NBSAPs. (See page 34). One reason for this lack of attention to migratory species in NBSAPs could be a lack of cooperation and coordination on a daily basis between CBD and CMS focal points.

Only 22 countries that are Parties to the CBD and CMS have the same focal points for the two conventions. For approximately 40 countries, the focal points to the two conventions are placed in different government institutions. For the Parties that have the two focal points in the same Ministry/Department, more than half of them are divided between different divisions.

Typically, CBD focal points are high level staff in horizontal international policy units of the Ministry of Environment or in the Ministry of Foreign Affairs, while CMS focal points are often based in more technical/scientific agencies and units.

A special feature of the CMS is that a number of national focal points are Ambassadors or other employees of the country's Embassy in the host country of the CMS Secretariat, Germany.

Source: CMS website, www.cms.int/about/nbsap/national_focal_points.pdf.

3. CBD and CMS

CBD has 191 Parties while CMS has 115 Parties, all of them being also CBD Parties. Thus, CMS Parties all have a dual obligation: To conserve and sustainably use migratory species as well as biodiversity in general. This further stresses the need for a coherent approach to implementation of the two conventions.

Broad action to conserve biodiversity and sustainably use natural resources by mainstreaming across economic sectors and applying the ecosystem and precautionary approach, as required by the CBD, is evidently of benefit to migratory species. On the other hand, targeted action prescribed by CMS and its instruments to conserve one specific group of migratory species would require different measures to protect their habitats, such as less intensive farming practices and designation of protected areas. This would be of benefit to biodiversity in general because migratory species are interrelated with other components of biodiversity, such as resident animals and plants. This is even more the case if the action is part of concerted and coordinated action of all the countries along the migratory range.

The different work programmes and decisions adopted by the two conventions through the years underline their mutually reinforcing nature:

- Under the auspices of CMS, several instruments have been adopted by Range States of particular migratory species, mostly in the form of legally binding agreements and Memoranda of Understanding. Some of these cover large areas of the world and, if properly implemented, they are likely to have significant positive effects for conservation and sustainable use of biodiversity in general. Moreover, CMS has been a pioneer in addressing serious threats to, but certainly not limited to, migratory species such as climate change, invasive alien species, avian influenza, wind turbines, oil spills, unsustainable fishery and tourism.
- CBD has, among other things, adopted thematic work programmes corresponding to some of the major biomes of the world, that are also important habitats of migratory species including dry and sub-humid lands (See Box 6), forests, inland waters, coastal and marine areas, islands and mountains. Moreover, work programmes, guidelines, and other tools have been adopted on cross-cutting issues of high relevance to migratory species such as sustainable use, climate change, communication, education and public awareness, the ecosystem approach, impact assessment, invasive alien species, protected areas and tourism. (The CBD work programmes, guidelines, decisions etc. with the most direct relevance to CMS are outlined in the annex of this publication).

CBD has recognized CMS as the lead partner in conserving and sustainably using migratory species over their entire range.¹¹

At CBD COP10 in Nagoya, Japan 2010, a Strategic Plan for Biodiversity 2011-2020 was adopted with an overall target to *“take effective and urgent action to halt the loss of biodiversity in order to ensure that by 2020 ecosystems are resilient and continue to provide essential services, thereby securing the planet’s variety of life, and contributing to human well-being, and poverty eradication.”*¹²

In addition, 20 sub-targets, the Aichi Targets, were adopted. (See Box 4.) While Target 12 to prevent species extinction has the most direct relevance for CMS, many other targets are pertinent. The coming Strategic Plan for the CMS to replace the Strategic Plan 2006-2011¹³ is expected to address the Aichi Targets and the role of CMS in their fulfilment.

Discussions on promoting greater coherence between the CBD and CMS, as well the other biodiversity-related conventions, have so far focused largely on processes at the international level. Many decisions have been made at the various COPs on enhanced cooperation between conventions. A Liaison Group between the biodiversity-related conventions has been established at Secretariat level¹⁴ and a joint work programme between CBD and CMS has been agreed on by the two Secretariats in 2002 and endorsed by CBD COP6 in 2002.¹⁵

Much less attention has been paid to the key issue for achieving the objectives of the conventions in a coherent and resource-effective way – how to enhance cooperation and coordination at the national level. The best cooperation and coordination between secretariats and convention bodies will have no impact on the ground if those responsible for national implementation of the conventions are not acting in a coordinated and consistent way. National Biodiversity Strategies and Action Plans provide a good starting point.

Box 4:

The Aichi Targets

Strategic Goal A: Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society

Target 1

By 2020, at the latest, people are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably.

Target 2

By 2020, at the latest, biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting systems.

Target 3

By 2020, at the latest, incentives, including subsidies, harmful to biodiversity are eliminated, phased out or reformed in order to minimize or avoid negative impacts, and positive incentives for the conservation and sustainable use of biodiversity are developed and applied, consistent and in harmony with the Convention and other relevant international obligations, taking into account national socio-economic conditions.

Target 4

By 2020, at the latest, Governments, business and stakeholders at all levels have taken steps to achieve or have implemented plans for sustainable production and consumption and have kept the impacts of use of natural resources well within safe ecological limits.

Strategic Goal B: Reduce the direct pressures on biodiversity and promote sustainable use

Target 5

By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced.

Target 6

By 2020 all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits.

Target 7

By 2020 areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity.

Target 8

By 2020, pollution, including from excess nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity.

Target 9

By 2020, invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment.

Target 10

By 2015, the multiple anthropogenic pressures on coral reefs, and other vulnerable ecosystems impacted by climate change or ocean acidification are minimized, so as to maintain their integrity and functioning.

BOX 4 continued:

Strategic Goal C: To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity

Target 11

By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.

Target 12

By 2020 the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained.

Target 13

By 2020, the genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives, including other socio-economically as well as culturally valuable species, is maintained, and strategies have been developed and implemented for minimizing genetic erosion and safeguarding their genetic diversity.

Strategic Goal D: Enhance the benefits to all from biodiversity and ecosystem services

Target 14

By 2020, ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded, taking into account the needs of women, indigenous and local communities, and the poor and vulnerable.

Target 15

By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks have been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification.

Target 16

By 2015, the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization is in force and operational, consistent with national legislation.

Strategic Goal E: Enhance implementation through participatory planning, knowledge management and capacity building

Target 17

By 2015 each Party has developed, adopted as a policy instrument, and has commenced implementing an effective, participatory and updated national biodiversity strategy and action plan.

Target 18

By 2020, the traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected, subject to national legislation and relevant international obligations, and fully integrated and reflected in the implementation of the Convention with the full and effective participation of indigenous and local communities, at all relevant levels.

Target 19

By 2020, knowledge, the science base and technologies relating to biodiversity, its values, functioning, status and trends, and the consequences of its loss, are improved, widely shared and transferred, and applied.

Target 20

By 2020, at the latest, the mobilization of financial resources for effectively implementing the Strategic Plan for Biodiversity 2011-2020 from all sources, and in accordance with the consolidated and agreed process in the Strategy for Resource Mobilization, should increase substantially from the current levels. This target will be subject to changes contingent to resource needs assessments to be developed and reported by Parties.

(CBD Decision X/2, Annex, "Strategic Plan for Biodiversity 2011 – 2020 and the Aichi Biodiversity Targets").

4. Obligations, measures, and actions set out by the CMS and CMS instruments

2.1. CMS

The multilateral nature of conserving migratory species had already been recognized by the UN Conference on the Human Environment in Stockholm in 1972 which mandated the elaboration of a broad convention leading to the negotiation of the Convention on Migratory Species of Wild Animals. The Convention entered into force on 1 November 1983.

The Conference of the Parties (COP), which meets every three years, is the decision making body of the Convention. The Scientific Council provides scientific advice to the COP and the Secretariat, and the Standing Committee acts on behalf of the COP in developing policies and providing administrative guidance between the COPs.

The CMS includes different types of requirements for conservation, depending on the degree of threat to the particular species:

In articles I and II, Parties generally acknowledge the importance of migratory species and the need to take measures - individually or in co-operation - to improve unfavourable conservation for migratory species and to avoid them becoming endangered.

Species considered endangered are listed in Annex I to the Convention. In relation to those species Range State Parties, in accordance with Article III.4, 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; and*
- c) *to the extent feasible and appropriate, to prevent, reduce or control factors that are endangering or are likely to further endanger the species, including strictly controlling the introduction of, or controlling or eliminating, already introduced exotic species”.*

According to Article II.5, Parties are required to prohibit taking of Annex I species, except if the taking is for scientific purposes, the purpose of enhancing the propagation or survival of the affected species, accommodating the needs of traditional subsistence users of such species, or extraordinary circumstances that require taking.

Annex I currently includes more than 100 species. A species can be removed from Appendix I if it is no longer considered to be in danger of extinction and is likely to remain out of such danger. So far, no species have been removed.

Species listed in Annex II are considered to have an unfavourable conservation status and require international agreements for their conservation and management. The list also includes those which have a conservation status that would significantly benefit from the international

cooperation that could be achieved by an international agreement. (Article IV.1). Currently, Annex II includes more than 1,000 species.

According to Article IV.3, Parties that are range states of Annex II species “shall endeavour to conclude AGREEMENTS where these should benefit the species and should give priority to those species in an unfavourable conservation status”. “Agreements “(not in capital letters) can also be made pursuant to Article IV.4 “for any population or any geographically separate part of the population of any species or lower taxon of wild animals, members of which periodically cross one or more national jurisdiction boundaries”.¹⁶ The large majority of agreements and MoUs under the auspices of CMS have been concluded on the basis of Article IV.4.

Article 5 of the Convention provides for voluntary, general guidelines for Article IV.3 AGREEMENTS.

In 2005, COP 8 adopted a CMS Strategic Plan 2006 – 2011 to ensure a coherent approach to the Convention’s implementation with the following four objectives, each with a number of sub-targets¹⁷.

- 1) To ensure that conservation and management of migratory species is based on the best available information.
- 2) To ensure that migratory species benefit from the best conservation measures.
- 3) To broaden awareness and enhance engagement in the conservation of migratory species amongst key actors.
- 4) To reinforce CMS’s overarching and unifying role in the conservation and management of migratory species.

2.2. Instruments under the CMS

The instruments concluded under CMS for species or groups of species fall in 3 categories:

- 1) Legally binding agreements, in total 7, concluded either pursuant to Article IV.3 (4) or IV.4 (3).
- 2) Non-legally binding agreements in the form of 19 Memoranda of Understanding concluded pursuant to Article IV.4
- 3) Concerted Actions for species or groups of species to be undertaken by Range States. These are less formal mechanisms endorsed by the COP often comprising action plans and, in some cases, followed up by the conclusion of legally binding agreements or MoUs.

The legally binding agreements largely mirror CMS in terms of institutional structure through regular meetings of the Parties serving as decision making bodies and in some cases with scientific/technical¹⁸ and standing committees¹⁹. The MOU's typically have meetings of signatories as decision making bodies.

The agreements and MoUs share some common features regarding measures and actions to be taken by the parties/signatories, individually or collectively, to secure a favourable conservation status for the species covered. These include:

- Conservation and restoration of the habitats important to the species
- Prohibition of taking with some exceptions
- Elimination or control of non-native species detrimental to the protected species
- Measures to prevent, remove, minimize or mitigate the adverse effects of activities that may influence the conservation status of the species
- Research into the effective conservation of the species
- Training
- Measures to raise awareness and understanding of the species
- Collecting and analysing relevant data
- Exchanging expertise, techniques and knowledge
- Review and, if necessary, revision of national legislation
- Cooperation in emergency situations
- Ratification or accession to biodiversity-related international instruments that complement the agreement/MOU

Most agreements and MoU's are accompanied by action plans-either appended or adopted separately by the decision making body - with more concrete measures for achieving and maintaining a favourable conservation for the species covered.

To a large extent, the actions set out in the MOU's are explicitly made subject to the availability of resources.

The agreements and MoU's vary considerably, both in terms of number of species covered and the number of participants. While a large number cover only one species, the Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA) covers 255 species and 554 populations. AEWA is also the largest agreement with regard to participants, with 63 Parties. At

the opposite end, the MoU's for the Conservation of the Ruddy-headed Goose (*Chloephaga rubidiceps*) and the South Andean Huemul (*Hippocamelus bisulcus*) cover only two countries, in both cases, Argentina and Chile.

The agreements and MoU's do not exclude countries that are not Parties to CMS from taking part, and many of these have participation of Range States that are not parties to the CMS. In total, 34 non-Party countries participate in one or more of the instruments.

Only a few of the instruments have full participation of the Range States of the particular species.

At COP8 in 2008, it was decided that the focus for the triennium 2009-2011 should be the implementation and operationalization of the existing agreements under CMS auspices and taking forward the work for the future shape of CMS.²⁰

The different instruments and their action plans, as well as fact sheets for the instruments are available on the CMS website: www.cms.org

2.3. Selected obligations, measures, and actions set out for different taxonomic classes

Birds

Birds comprise the largest group, in terms of number of species, listed on the CMS annexes. A large number of resolutions adopted at COPs on concerted actions comprise bird species, and the same applies to the agreements and MOU's signed between Range States.

As mentioned above, the most comprehensive of these is the Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA), which entered into force in 1999. The range of the 255 waterbirds species and 554 populations listed in AEWA constitute a large part of the globe, namely the whole of Europe and Africa, the Middle East, parts of West central Asia, parts of the Arctic, North Eastern Canada, and Greenland covering 118 states, of which 63 are currently Parties. Among the main threats to these birds are depletion of their food supplies (for example through overfishing), unsustainable hunting and climate change.

The AEWA Action Plan calls on parties to take strict measures on taking, trading, disturbance, emergency situations, introduction of exotic species, and other threats to birds. Parties shall endeavour to establish protected areas to conserve habitats for the listed bird populations, to use all of the wetlands in their territory wisely and sustainably, and to rehabilitate and restore degraded habitats.

Furthermore, Parties to AEWA shall endeavour to promote sensitive and appropriate eco-tourism activities at wetlands holding listed birds – although not in core zones of protected areas – and evaluate the costs and benefits of such activities. They shall also promote research, monitoring, education and public awareness.

A particularly important element of the AEWA Action Plan is the development of single species action plans, both at the international and the national level. To date, 15 international plans have been approved.

The UNEP-GEF African Eurasian Flyways Project “Wings over Wetlands” is a key tool in facilitating the exchange of expertise between a broad range partners towards implementation of AEWA. (See Box 5).

Another instrument to protect migratory bird species in a large part of the world is the Memorandum and Understanding on the Conservation of Migratory Birds of Prey in Africa and Eurasia. Signed initially in 2008 and now with 30 Range State signatories, the MOU covers migratory populations of birds of prey and owls in the region. The most serious threat faced by these birds comes from human-induced habitat loss and degradation (including impacts from pesticide use and pollution). Climate change is expected to exacerbate these habitat-related problems profoundly.

Priority actions of the action plan annexed to the MoU include protection for all species from unlawful killing, promoting high environmental standards (including through Environmental Impact Assessments in the planning and construction of structures to minimise their impact on birds of prey, taking the needs of birds of prey conservation into account in sectors and related policies and raise awareness about birds of prey.

The Agreement on the Conservation of Albatrosses and Petrels (ACAP), which entered into force in 2004, is not geographically restricted; it has 13 Parties from South America, Africa, Europe and Australasia. The main threats to the Albatrosses and Petrels are by-catch in fisheries, habitat degradation, marine pollution and loss of prey due to overfishing.

The ACAP Action Plan sets out measures for direct species conservation, habitat restoration and the management of human activities impacting albatross populations. By-catch in fisheries is to be reduced or eliminated through appropriate management. Marine pollution and discharge from vessels are to be minimised and activities to raise public awareness are to be undertaken.

Another multi-species instrument for birds is the Memorandum of Understanding on the Conservation of Southern South American Migratory Grassland Bird Species and Their Habitats from 2007. Signed by Argentina, Bolivia, Paraguay, Uruguay and Brazil, it responds to fragmentation of grassland habitats, illegal capture and trade, and other causes of the serious decline in populations of these species.

The remaining instruments to conserve migratory birds species are MoU’s that cover one or two species, namely the Siberian Crane (1993), Slender-billed Curlew (1994), Great Bustard (2001), Aquatic Warbler (2003), Ruddy-headed Goose (2006) and High Andean Flamingos (2008).

Box 5:

Taking a flyway approach

Birds are the largest group of species listed on the CMS annexes. The life cycle of migratory birds illustrates, like no other phenomenon, the connectivity of ecosystems across the globe.

Their migration chain is only as strong as its weakest link. If one link breaks, an entire population may decline. Thus, concerted management efforts along the entire flyway on conservation and wise use are required. This ensures connectivity between sites, species and the ecological interactions that link them, while also ensuring that the needs of local people are met.

The UNEP-GEF African-Eurasian Flyways project “*Wings Over Wetlands*” (WOW) showcases how the flyway approach can be put into practice and provide a potential model to adapt to other flyways. The principal goal is to raise awareness on the links between the sites needed by migratory waterbirds in their life cycles, as well as to develop innovative tools to support their conservation and promote the wise use of wetlands across the entire flyway. WOW has significantly helped to boost the implementation of AEWA and the Ramsar Convention and has contributed to making the flyway approach more mainstream and well-known in the African-Eurasian region and beyond.

WOW has two main products:

1) **The Critical Site Network Tool** is an open-access information portal that integrates current knowledge on migratory waterbirds along the African-Eurasian flyways. The CSN Tool will provide better access to the waterbird and site information that national authorities need to implement AEWA.

2) **WOW’s Flyway Training Kit** is helping to build this capacity for flyway conservation across the African-Eurasian region. The programme includes a set of practical and adaptable training materials to assist in targeted trainings, which can be customized by topic as they relate to flyway conservation, wetland management and migratory waterbird conservation.

WOW was launched in 2006 as a joint effort among UNEP-GEF, Wetlands International, BirdLife International, AEWA, the German Federal Agency for Nature Conservation (BfN), the Ramsar Convention on Wetlands, UNOPS, UNEP-WCMC, and a range of other donors and local partners along the African-Eurasian flyways.

Another important waterbirds initiative is the Central Asian Flyway Action Plan for the Conservation of Migratory Waterbirds and their Habitats (CAF) for one of the world’s most vital routes for migratory birds, ranging from the Arctic to the Indian Ocean. An Action Plan was finalized and launched in 2008 after consultations with the 30 range states. It covers 175 species, of which 13 are listed on Appendix I of the Convention. It contains provisions for species and habitat conservation, single species action plans and emergency measures. It will be an umbrella for the creation of a CAF Site Network. Management of human activities, including hunting, eco-tourism, research, capacity building and implementation are covered.

Other flyway initiatives in the pipeline include the East Asian-Australian, American and Pacific flyways.

Sources: Wings of Wetlands website www.wingsoverwetlands.org. and CMS website www.cms.int.

Terrestrial mammals

A recent major achievement by the CMS is the creation of a legal framework to protect the world's largest primate, the highly endangered Gorilla. The Agreement on the Conservation of Gorillas and Their Habitats came into force in 2008, and 6 out of the 10 central African range states are now Parties²¹.

Gorillas are threatened by poaching for bush meat, the exotic pet trade, habitat loss and fragmentation, civil unrest, and war and diseases such as Ebola which can be transmitted by humans.

An Action Plan has been prepared that will be achieved through reinforced efforts for trans-border collaboration, protected areas networks, surveillance and data collection, eco-tourism, involvement of local communities, and fundraising.

The Gorilla Agreement is supported by close cooperation between the CMS Secretariat and the Great Apes Survival Project Partnership (GRASP), a UNEP- and UNESCO-led partnership to save the Great Apes.

The only other legally binding agreement covering terrestrial mammals is the Agreement on the Conservation of Populations of the European Bats (EUROBATS) which entered into force 1994 and has 33 out of 48 range states as Parties.

Like for other agreements and MOU's, an action plan (referred to as Conservation and Management Plan in EUROBATS) is the key instrument for implementation. It addresses issues such as legal requirements, population, surveys and monitoring, roosts, foraging habitats, the use of pesticides, and the promotion of public and professional awareness.

EUROBATS applies to all European populations of 45 bat species. The main threats to the bats have come from the intensification of agriculture and forestry, leading to loss of food supplies and roosts. These changes have been compounded by widespread public prejudices against bats.

Sahelo-Saharan Antelopes have been in serious decline for many decades due to unsustainable hunting and degradation of habitats. Therefore, an Action Plan for Concerted Action was adopted in 1998, covering 14 range states for conservation of 6 antelope species listed on Annex I to improve their conservation status. (See Box 6).

Also in the Eurasian region, a number of arid-land mammals are listed on Annex I and II and following a recommendation from COP9, an Action Plan for Concerted Action for these species is under preparation²².

Single species MoU's have been concluded on the following terrestrial mammals: Bukhara Deer (2002), African Elephant (2005) and Saiga Antelope (2006).

Marine mammals

Marine mammals have received considerable attention from CMS, both in terms of numbers of COP resolutions and recommendations on this group of species and the threats they face, and in terms of agreements and MOUs.

Marine mammals are affected by multiple threats including by-catch in fisheries, pollution, noise, collisions with ships, and deliberate killing.

The extensive attention applies in particular to cetaceans, for which two regional agreements have been adopted:

1. The Agreement on the Conservation of Small Cetaceans of the Baltic, North East Atlantic Irish and North Seas (ASCOBANS) entered into force in 1994 and has 10 out of 17 Range States as Parties. The ASCOBANS Conservation and Management Plan requires Parties to take measures on habitat conservation and management, surveys and research, abatement of pollution, and raising public awareness. In recent years, a lot of attention has been devoted to reducing by-catch by encouraging the use of alternative fishing gear.

The Harbour Porpoise (*Phocoena phocoena*) is the most abundant cetacean species in the North Sea and the only native species inhabiting the Baltic Sea. For this species a special action plans was adopted in 2003 and revised in 2009 (the Jastarnia Plan).

2. The Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Area (ACCOBAMS) entered into force in 2001. The Parties include 21 out of 29 range states. According to the ACCOBAMS Conservation Plan, Parties shall take action on issues such as adoption and enforcement of national legislation, assessment of and management of human-cetacean interactions, habitat protection, research and monitoring, capacity building, collection and dissemination of information, training and education, and responses to emergency situations.

Instruments for protection of Cetaceans have also been adopted in other regions: The Memorandum of Understanding for the Conservation of Cetaceans and Their Habitats in the Pacific Islands Region came into effect in 2006 and now has 12 range states as signatories. The MoU concerning the Conservation of the Manatee and Small Cetaceans of Western Africa and Macaronesia was concluded in 2008 and currently has 15 signatories. Two action plans, one for cetaceans and one for the West African Manatee, form part of the MoU.

Seals have been subject to regional action through the Agreement on the Conservation of Seals in the Wadden Sea which entered into force in 2001 and has all three Range States as Parties: Denmark, Germany, and the Netherlands. Moreover, the MoU concerning Conservation Measures for the Eastern Atlantic Populations of the Mediterranean Monk Seal, one of the most threatened marine mammals in the world, was signed in 2007 by all four Range States.²³

The vulnerable and seriously threatened marine mammal, Dugong, is subject to the MoU on the Conservation and Management of Dugongs (*Dugong dugon*) and Their Habitats throughout Their Range from 2007, covering the Indian Ocean and with currently 19 state signatories.

Reptiles

Marine turtles are threatened by by-catch, unsustainable consumption of meat and eggs, degradation of their coastal habitats, climate change and pollution. There are two MOUs concerning marine turtles: one for the Indian Ocean and South East Asia (2001, 32 State signatories) and one for the Atlantic Coast of Africa (2002, 23 signatories).

Fish

The most recent CMS instrument is the MoU on the Conservation Migratory Sharks adopted in 2010 and currently signed by 16 States. The MoU, among other things, calls on the signatories to improve understanding of migratory shark populations through research, monitoring and information exchange, ensure that directed and non-directed fisheries for sharks are sustainable, protect critical habitats and migratory corridors and critical life stages of sharks, increase public awareness of threats to sharks and their habitats, and enhance public participation in conservation activities.

Sharks are mainly threatened by by-catch, illegal, unreported, and unregulated fishing, trophy hunting, marine debris, ecosystem modifications, anthropogenic disturbances, and increasing pressures on the marine environment due to climate change.

Besides sharks, most attention among migratory fish has been given by the CMS to the European Sturgeon, the largest migratory fish in Europe and in critical danger of extinction. An Action Plan is under development in cooperation between the Bern Convention on the Conservation of European Wildlife and Natural Habitats and CMS.

Insects

The only insect listed on CMS is the Monarch Butterfly (*Danaus plexippus*) on Annex II.

Box 6:

Dry and sub-humid land, an obvious area for synergy in implementation of the Convention on Biological Diversity, the Convention on Migratory Species and the UN Convention to Combat Desertification.

Dry and sub-humid lands are a specialised domain of activity for CMS. Migratory species are very prevalent in such areas, and a number of these are listed on the CMS appendices. This includes six antelope species of the Sahelo-Saharan region listed in Appendix I, which historically have played an important role in the culture and livelihood of local people in the region. However, due to excessive illegal hunting activities and severe habitat degradation, the antelopes have been in rapid decline. One species (the Scimitar-horned Oryx - *Oryx dammah*) has already become extinct in the wild and others are at the brink of extinction.

In response, CMS COP 4 in 1994 adopted a recommendation for concerted action for the six Sahelo-Saharan antelope species (Rec. 4.5), followed by an Action Plan in 1998 to restore range and numbers, reduce mortality and enhance international cooperation. COP 9 in 2008 recommended that the concerted action for the antelopes should be extended to Sahelo-Saharan Megafauna, covering all threatened migratory species in the arid lands of the region. (Rec 9.2).

CMS has taken a similar approach with respect to another region with large areas of dry and sub-humid lands and many migratory species in a profoundly unsatisfactory conservation status through “the Central Eurasian Aridland Concerted Action”, adopted by COP 8 in 2005 (Rec. 8.23) and followed up by COP 9 in 2008 (Rec. 9.1). A coming Action Plan will include all threatened arid land migratory mammals of the area.

Many migratory bird species use wetlands ecosystems of dry and sub-humid land. A number of them are listed to the Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA), while others have their separate MoU’s, such as the Siberian Crane, the Slender Billed Curlew, and the Great Bustard.

Dry and sub-humid lands are also important for biodiversity in the broader sense, and for delivering essential ecosystem services. The areas include unique landscapes containing a wide variety of biodiversity that is well adapted to the often harsh conditions there. This biodiversity forms the basis of many livelihoods in dry and sub-humid lands and supports a large proportion of the world's food production.

In recognition of the importance and uniqueness of the biodiversity of dry and sub-humid lands, COP5 of the CBD in May 2000 adopted a programme of work on this biome (Decision V/23). It seeks to fill gaps in our knowledge base, support best management practices through targeted actions in response to identified needs, and promote partnerships among countries and institutions. The work programme further aims to promote synergy and coordination with related conventions.

5. National Biodiversity Strategies and Action Plans (NBSAPs)

What are NBSAPs?

Article 6(a) of the CBD requires all Parties to develop National Biodiversity Strategies and Action Plans (NBSAPs). The Conference of the Parties to the CBD has determined that NBSAPs should be the primary mechanisms for its implementation. The strategy is meant to be a road map for how a country intends to fulfil the objectives of the Convention in light of its specific national

circumstances. The related action plan should constitute the sequence of steps to be taken to meet the goals of the strategy.

Article 6(b) of the CBD determines that considerations for biodiversity shall be integrated across all sectors of government, economic sectors, and involve other actors who have an impact on biodiversity through relevant sectoral or cross-sectoral plans, programmes and policies. The placing of the two concepts - NBSAPs and mainstreaming - in the same article is no coincidence. The development of the NBSAP is meant to be the cornerstone in fulfilling the requirement to mainstream biodiversity and the objectives of the CBD across sectors. NBSAPs developed in isolation from other sectoral plans and programmes will not be able to address the root causes of biodiversity loss.

Instead of preparing distinct NBSAPs, countries have the option, according to Article 6(a), of adapting existing strategies, plans and programmes to meet the objectives of the Convention if this is more appropriate for national circumstances.

Neither the CMS nor the other four biodiversity related conventions have provisions for national strategies and/or action plans as tools for implementation.

Latest CBD decisions on NBSAPs and their relation to the other biodiversity-related conventions

CBD COP10 in 2010 reiterated the importance of NBSAPs for national biodiversity planning, highlighting their importance for implementation of the other biodiversity related conventions through the Aichi Target 17, which states that by 2015 each Party has developed, adopted as a policy instrument, and commenced implementing an effective, participatory and updated NBSAP.

The accompanying decision urges Parties *“to support the updating of national biodiversity strategies and action plans as effective instruments to promote the implementation of the Strategic Plan and mainstreaming of biodiversity at the national level, taking into account synergies among the biodiversity-related conventions in a manner consistent with their respective mandates”*.²⁴

Furthermore, Parties are invited to *“involve national level focal points of all the biodiversity-related agreements, as appropriate, in the process of updating and implementation of national biodiversity strategies and action plans and related enabling activities”*²⁵, and the CBD Executive Secretary is encouraged to *“collaborate with the secretariats of other biodiversity-related conventions to facilitate the participation of national focal points of these agreements, as appropriate, in the updating and implementation of national biodiversity strategies and action plans and related enabling activities.”*²⁶

Specifically on CMS, COP10 requests the two Conventions’ Secretariats to update the joint work programme between the two conventions and to collaborate on providing support and guidance to Parties regarding the integration of migratory species considerations in NBSAPs.²⁷

With the support of Japan and other donors, the CBD Secretariat is organizing a series of regional or sub-regional workshops to assist Parties in updating their NBSAPs. This includes facilitating national implementation of the new Strategic Plan for Biodiversity 2011–2020 and transposing it into national targets and commitments.

The Global Environmental Facility (GEF) is entrusted with the operation of the financial mechanism of the CBD. For developing countries and countries with economies in transition, funding is available from GEF to support their activities enabling the development and updating of their NBSAPs.²⁸

General assessment of NBSAPs

To date, 173 countries (approximately 90 per cent of the total number of CBD Parties) have adopted their NBSAPs or equivalent instruments.²⁹ A number of the remaining countries have informed the CBD Secretariat that they are in the process of preparing their NBSAPs. Around 50 countries have revised their NBSAPs, or are in the process of doing so.

From 2008-2010, the United Nations University Institute of Advanced Studies (UNU-IAS) carried out a comprehensive assessment of NBSAPs to draw out lessons learned from national experiences in their development, implementation and revision.³⁰ The assessment contributed to discussions at COP-10 in Nagoya, Japan in October 2010 on the implementation of the CBD and the development of the Strategic Plan 2011–2020.

Among other things, the assessment sought to establish if NBSAPs were successful in integrating biodiversity concerns into sectoral and cross-sectoral policies, including sustainable development strategies, poverty reduction strategy papers (PRSPs), and national processes to meet the Millennium Development Goals (MDGs). It also sought to identify any obstacles preventing Parties from making progress. The assessment included in depth case studies of nine countries.

A summary of key finding includes:

- The large number of NBSAPs is, in itself, an achievement for biodiversity conservation and an indispensable step on the road to implementation. NBSAPs have generated important results in many countries, including a better understanding of biodiversity, its value and what is required to address threats to it. Legal gaps in implementation have been filled, the coverage of protected areas has been considerably extended, and in many countries better protection of endangered species has been introduced.
- In spite of these achievements, NBSAPs have not seriously affected the main drivers of biodiversity loss. There is generally poor correlation between NBSAPs and poverty alleviation and MDG strategies, as well as between NBSAPs and sectoral policies.

- The shortcomings of NBSAPs in influencing mainstream development are largely attributable to weaknesses in the process of their development.
- Many processes were often more technical than political and did not manage sufficiently to influence policy beyond the remit of the national agency directly responsible for biodiversity. Coordination structures exist in most cases, but often with limited political and cross-sectoral ownership, as well as limited ownership at the sub-national level. Many NBSAPs are overly ambitious and prescriptive, while at the same time lacking a strategy for financing implementation. They often appear to have been addressed to external funding agencies rather than national decision-makers.
- The level of endorsement, and thereby ownership, of the NBSAP at the government level is critical to its success. It appears that most first generation NBSAPs were approved at the level of the minister responsible for the national CBD focal point or below.
- The three objectives of the CBD receive varying levels of attention in NBSAPs. 'Conservation' received the most attention followed by 'sustainable use'. 'Equitable sharing of benefits arising out of the utilization of genetic resources' received the least amount of attention.
- The NBSAPs are quite varied in form and content. There is no clear differentiation between developed and developing country NBSAPs, or among geographic regions. Development status does not predetermine the quality of national biodiversity planning, and often, regional neighbours with shared characteristics and a comparable development status show marked differences in the approaches adopted and their effectiveness.
- Only a minority of NBSAPs address the question of climate change and, when they do, this is mostly in the form of simply reflecting on the impact of climate change on biodiversity, not in the form of specific objectives and actions. Very few NBSAPs emphasize the role of diverse and robust ecosystems in mitigation and adaptation.
- Few NBSAPs explicitly incorporate measures to implement other biodiversity-related conventions than the CBD. Among those, the Ramsar Convention receives the most attention.
- Second generation NBSAPs have a stronger emphasis on mainstreaming and are far more strategic and action-oriented than the first generation. They generally have been approved at a higher political level and also include a higher degree of self-reliance when compared to many first generation NBSAPs.

Based on the findings, the assessment report offers 28 recommendations for preparation and design of future NBSAPs. One of these is that NBSAPs should be an instrument for implementation of all the biodiversity-related conventions, and thereby promote coherence in national implementation.³¹

Coverage of CMS in existing NBSAPs

All but five Parties to the CMS have prepared NBSAPs.

As mentioned above, only a few NBSAPs explicitly incorporate measures to implement other biodiversity-related conventions than the CBD. A review of CMS Parties NBSAPs confirms that this is very much the case with respect to CMS.

Even though a large majority of NBSAPs refer to migratory species in their general descriptions of the state of biodiversity in the country, not even half of the NBSAPs refer to the country being a Party to the CMS. Even fewer refer to their status as Parties or signatories to agreements and MoU's under the CMS.

Very few NBSAPs include measures directly referring to implementation of CMS in their operative part, and even fewer refer to implementation of agreements and MoUs.

Some, but still few, NBSAPs include measures referring to the conservation and sustainable use of migratory species without reference to CMS or related agreements/MoU's.

It should be noted that even without reference to CMS, CMS instruments, or migratory species, many NBSAPs may still implicitly provide measures that are highly beneficial for migratory species, not least because "conservation" by far is the one of the three CBD objectives receiving most attention in NBSAPs, as referred to above. In that context, most NBSAPs cover the topic of "protected areas" quite comprehensively compared to other topics, thereby indicating its importance relative to the conservation of migratory species.

Box 7:

NBSAPs with considerations for migratory species

Migratory species and CMS have generally received very limited attention in NBSAPs so far, but there are exceptions. Some of them are outlined below:

Egypt's NBSAP includes policy objectives to:

- *“ensure haven-habitat for migratory birds en route during their seasonal voyages”*
- *“provide field sites for research (wetland ecosystems) and monitoring (migratory birds) and education and training”*
- *“ensure secure (or less hazardous) passage of migratory birds along the highway of the Red Sea, and to sustain the ecological health of this major bio-geographic corridor”*

The NBSAP of Eritrea includes the following activities to be undertaken:

- *“Increased documentation of transboundary species in Eritrea and increased collaboration with appropriate international agencies through exchange of information on migratory species between relevant in-country and international organizations.”*
- *“Prepare a species conservation network and action plans for the protection of endangered endemic, migratory and/or indicator species, including marine turtles and mammals, migratory birds and sharks.”*

Activities outlined in the NBSAP of Croatia include to, *“draft and implement action plans for the protection of migratory species protected under international conventions”* and *“active implementation of protection of migratory species”*.

According to its NBSAP, Cuba will take into consideration the conservation needs of migratory species when establishing or extending protected areas.

Georgia will, *“improve the licensing procedure for hunting of migratory birds,”* according to its NBSAP.

Ireland includes as an NBSAP activity to *“ratify the African-Eurasian Migratory Waterbirds Agreement (AEWA).”*

Sources: NBSAPs of Egypt, Eritrea, Croatia, Cuba, Georgia and Ireland available on the CBD website www.cbd.int

Closing remarks

The Convention on Biological Diversity and the Convention on Migratory Species are complementary instruments by nature. The CBD covers biodiversity at ecosystem, species and genetic level with the objectives to conserve biodiversity, utilize its components sustainably, and equitably share the benefits arising out of the utilization of genetic resources. The objective of the CMS is to conserve one component of biodiversity, migratory species; a component that, more than others, underpins the interconnectivity and interdependence of the world's ecosystems and the need for action across borders to protect and restore them.

National implementation of the two conventions is inextricably linked and will be hampered if not undertaken as part of the same national planning process. The revision of NBSAPs, as called for by Aichi Target 17, is a unique opportunity to provide closer links between the national focal points of the CBD and the CMS family and promote coherent national action. Hopefully, this publication will provide inspiration and ideas on how this best can be done.

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- ¹ UNEP/CMS/Conf. 8.26
- ² CMS COP 8 in 2005 adopted a resolution on "Integration of Migratory Species into National Biodiversity Strategies and Action Plans and into On-going and Future Programmes of Work under the Convention on Biological Diversity" with an annex on guidance for integrating migratory species into NBSAPs (CMS Resolution 8.18). The guidelines presented here largely incorporate this guidance.
- ³ CBD Decision VII/12
- ⁴ CBD Decision VI/7-A and updated by Decision VIII/28
- ⁵ CMS Resolution 7.2
- ⁶ CMS Resolution 8.8
- ⁷ www.teebweb.org
- ⁸ UNEP/CMS/Conf. 8.22
- ⁹ CMS Resolutions 8.13 and 9.7
- ¹⁰ CMS Resolutions 6.2, 8.14, and 9.18
- ¹¹ CBD Decision VI/20
- ¹² CBD Decision X/2, Annex, "Strategic Plan for Biodiversity 2011 – 2020 and The Aichi Biodiversity Targets"
- ¹³ CMS Resolution 8.2
- ¹⁴ The following 6 global treaties, which cooperate at the secretariat level through the Biodiversity Liaison Group are normally referred to as the "biodiversity related conventions":
- Convention on Biological Diversity (CBD)
 - Convention on International Trade in Endangered Species (CITES)
 - Convention on Migratory Species (CMS)
 - Ramsar Convention on Wetlands (Ramsar Convention)
 - World Heritage Convention (WHC)
 - International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA).
 - (CBD Decision X/2, Annex, "Strategic Plan for Biodiversity 2011 – 2020 and The Aichi Biodiversity Targets")
- ¹⁵ CBD Decision VI/20
- ¹⁶ The term "AGREEMENT" in capital letters covered by Article IV.3 is a peculiarity of CMS otherwise unknown in international law and with no legal meaning in itself. The definition of the term in Article 1 as an "international agreement..." does not specify whether an AGREEMENT should be legal binding, but COP resolutions 2.6 and 3.5 indicate that this should be the case contrary to "agreements" pursuant to Article IV.4 for which a less formal character is recommended. (UNEP/CMS/Conf.9.16).
- ¹⁷ CMS Resolution 8.2
- ¹⁸ ACCOBAMS, AEWA and Gorilla Agreement
- ¹⁹ EUROBATS and AEWA
- ²⁰ CMS Resolution 9.2
- ²¹ Central African Republic, Congo Republic, Democratic Republic of Congo, Gabon, Nigeria and Rwanda
- ²² CMS Recommendation 9.1
- ²³ The Islamic Republic of Mauritania, the Kingdom of Morocco, the Republic of Portugal and the Kingdom of Spain
- ²⁴ Decision X/2, para. 3(f)
- ²⁵ CBD Decision X/5, para. 3
- ²⁶ CBD Decision X/5 para.7.c
- ²⁷ CBD Decision X/20
- ²⁸ CBD Notification 2011-015
- ²⁹ Source: CBD Secretariat, www.cbd.int/nbsap
- ³⁰ Prip, C; Gross, T; Johnston, S; Vierros, M (2010) *Biodiversity Planning: an assessment of national biodiversity strategies and action plans*. United Nations University Institute of Advanced Studies, Yokohama, Japan
- ³¹ Prip et al., recommendation 15 p. 101.

Annex

CBD Work programmes, guidelines , initiatives, decisions etc. with specific relevance for the CMS Family

Thematic programmes of work.

Agricultural biodiversity

<http://www.cbd.int/agro/pow.shtml>

Dry and sub-humid lands biodiversity

<http://www.cbd.int/drylands/pow.shtml>

Forest biodiversity

<http://www.cbd.int/forest/pow.shtml>

Inland waters biodiversity

<http://www.cbd.int/waters/pow.shtml>

Island biodiversity

<http://www.cbd.int/island/pow.shtml>

Marine and coastal biodiversity

<http://www.cbd.int/marine/resources.shtml>

Mountain biodiversity

<http://www.cbd.int/mountain/pow.shtml>

Joint work programme of the Convention on Biological Diversity and the Convention on the Conservation of Migratory Species of Wild Animals (2002-2005)

Doc. UNEP/CBD/COP/6/INF/15

<http://www.cbd.int/doc/meetings/cop/cop-06/information/cop-06-inf-15-en.pdf>

Cross-cutting issues

Strategic Plan 2011-2020 and the Aichi Biodiversity Targets

<http://www.cbd.int/sp/>

COP decisions on biodiversity and climate change

<http://www.cbd.int/climate/decision.shtml>

Global Initiative on Communication, Education and Public Awareness

<http://www.cbd.int/cepa/global-initiative.shtml>

Operational guidance for application of the Ecosystem Approach
<http://www.cbd.int/ecosystem/operational.shtml>

Global Taxonomy Initiative
<http://www.cbd.int/gti/pow.shtml>

Voluntary guidelines for biodiversity-inclusive Impact assessment
<http://www.cbd.int/impact/guidelines.shtml>

COP decisions on alien invasive species
<http://www.cbd.int/invasive/cop-decisions.shtml>

Programme of Work on Protected Areas
<http://www.cbd.int/protected/pow/learnmore/intro/>

The Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity
<http://www.cbd.int/sustainable/addis.shtml>

Guidelines on Biodiversity and Tourism Development
<http://www.cbd.int/tourism/guidelines.shtml>