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The Strategic Plan for Migratory Species 2015-2023

3rd and Final Draft

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Chapter 1. Rationale

1.1 Background to the SPMS

At the Tenth Meeting of the Conference of the Parties to the Convention on Migratory Species (CMS COP10; November 2011; Bergen, Norway), Parties resolved to prepare a new Strategic Plan for the period 2015-2023. COP8 had previously adopted a Plan for the period 2006-2011, which was extended by COP10 with minor changes to 2014.

The end-date of the present Plan was agreed because it coincides with the CMS COP cycle and, more importantly, it allows time for a review of progress during the UN Decade on Biodiversity (see Figure 1, with CMS milestones shaded). It also provides an opportunity to assess how the Strategic Plan for Migratory Species 2015-2023 (SPMS) has supported the Strategic Plan for Biodiversity 2011-2020 and its Aichi Biodiversity Targets. The SPMS targets are more specific and continue in effect for longer than the Aichi Biodiversity Targets (most of which have a 2020 end-date).

Milestone event	Date
Adoption of Strategic Plan for Biodiversity / Aichi Biodiversity Targets	2010
Adoption of Strategic Plan for Migratory Species	2014
CBD COP 13	2016
CMS COP 12 (tentative)	2017
CBD COP 14 (tentative)	2018
Completion date for Strategic Plan for Biodiversity and Aichi Biodiversity Targets	2020
CBD COP 15, including evaluation of progress towards Aichi Biodiversity Targets (tentative)	2020
CMS COP 13 (tentative) ²	2020
CBD COP 15 (tentative)	
CBD COP 16 (tentative)	2022
Completion date for Strategic Plan for Migratory Species	2023
CMS COP 14 (tentative)	2023
CBD COP 17 (tentative)	2024

Figure 1: Timeline for Biodiversity and Migratory Species Strategic Plans

A Strategic Plan Working Group (SPWG) was established with the task of drafting the Strategic Plan 2015-2023 for consideration by the Conference of the Parties at its 11th meeting.³ The Working Group commissioned a review of implementation experience to date, and took account of strategic planning processes in other multilateral environmental agreements. Two key recommendations emerged from its discussions:

(1) The Strategic Plan for Biodiversity and its Aichi Biodiversity Targets should be used as a framework when developing the SPMS. This approach was taken to: keep the SPMS consistent with UN General Assembly resolutions on biodiversity⁴; link migratory species priorities to the relevant Aichi Targets; and provide a logical and effective way for migratory species targets to be integrated into National

See Convention on Biological Diversity (2010). Strategic Plan for Biodiversity 2011-2020 and the Aichi Biodiversity Targets. Annexed to CBD COP10 Decision X/2.

² CMS COP13 will not be able to assess the evaluation of SPMS towards the Aichi Targets given that the evaluation of achievement of the Aichi Targets will only take place right before CMS COP 13. The integration of that evaluation will therefore only be possible at CMS COP14, hence the 2023 end date of the SPMS.

³ CMS COP10 Resolution 10.5, CMS Strategic Plan 2015–2023.

⁴ For example, Resolution 67/212 where the General Assembly: "Notes the efforts to mainstream the Aichi Biodiversity Targets in the contribution of the United Nations system to support the Strategic Plan for Biodiversity 2011–2020, and invites the United Nations system to continue facilitating cooperation among its members in support of the implementation of the Strategic Plan." This also has relevance, among other things, to the UN's post-2015 Sustainable Development Goals.

- Biodiversity Strategies and Action Plans (NBSAPs), thereby ensuring they are part of national planning and priority-setting processes.
- (2) The new plan should be a Strategic Plan for Migratory Species (the SPMS) and should focus on the conservation of migratory animals (populations, species or lower taxonomic levels, as the context requires), rather than on the Convention itself. This approach shifted the focus from the *institution* to the *issue*, thereby broadening relevance and "ownership" among the CMS "Family" of instruments and beyond. This approach is also consistent with COP decisions regarding the CMS "Future Shape" process, which identified the need for a coordinated and coherent approach to migratory species conservation among CMS and its daughter agreements.

Migratory species have distinct conservation needs, associated in particular with their temporal cycles and transboundary migration patterns. Conservation of migratory species at the population level can only be achieved by coordinated and cooperative international action between the Range States that share these populations on their migration routes. These States and other relevant stakeholders therefore share a joint responsibility to develop and implement coherent strategies. That responsibility may include activities such as collaboration to, *inter alia*, ensure free and open access to relevant data, information and models, so as to provide sound scientific grounding for decisions relating to migratory species.

Overall it demands the taking of a *migration systems approach*, which by its very nature is a strategic consideration. "Migration systems" is a concept which reflects the interdependent complexes of places, routes between places, populations, ecological factors and temporal cycles involved. A "migration systems approach" therefore implies conservation strategies which give holistic attention not only to populations, species and habitats, but to the entire span of migration routes and the functioning of the migration process.

Since 1979, the Convention on Migratory Species has provided the primary specialized intergovernmental framework for these cooperative efforts⁵, through its agreements, action plans and other systematic instruments.

This SPMS therefore does not duplicate the Strategic Plan for Biodiversity, but complements it by adding the necessary specificity for and focus on migratory species conservation, including within the context of the CMS Family.

The close interaction between the SPMS and the Strategic Plan for Biodiversity, furthermore facilitates national coordination on and integration of issues related to migratory species into national biodiversity strategies and action plans (NBSAPs), given that those are based on the Strategic Plan for Biodiversity and its Aichi Targets.

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Recognition of this is enshrined for example in cooperation agreements with other Conventions; and in the case of the CBD also by CBD COP Decision VI/20 (2002) which recognizes CMS as "the lead partner in conserving and sustainably using migratory species".

1.2 Why are migratory species a global priority?

Migratory species are a significant component of biodiversity in general, underpinning ecological systems. Many different groups of animals are involved, from antelopes to fish, from whales to elephants, from bats to birds and even butterflies. They form a substantial proportion of the world's genetic variety, having evolved in particularly intricate interrelationships with plant and other animal species; and they play essential roles in ecosystem functioning and dynamics. Their multi-dimensional connectedness gives them a special role as ecological keystone species and indicators of the linkages between ecosystems and of ecological change.

These same attributes mean that migratory species have their own special vulnerabilities. Migration journeys expose them to heightened survival risks, and habitat requirements are often a complex mix of different components in breeding areas, non-breeding areas, and the places in between. Concentrations of large numbers of individuals during specific periods at specific sites, also increases the risk of serious impacts from negative pressures at those sites. Barriers to migration pose special challenges, whether or not in the form of physical obstacles, which may cause direct mortality, or fragmentation of ecological resources disrupting movement from one place to another.

Many of the actions defined in this Plan are accordingly directed towards "migration systems", as described in section 1.1 above.

The repeating cycles and trans-boundary ranges inherent to the phenomenon of migration, as well as the massive scale of animal movements often involved, are fundamental to the ability of the planet to support humankind and biodiversity overall. Migration is a key adaptation to natural rhythms and evolutionary changes; and by the same token both migratory species and their habitats can be affected/disrupted by human impacts, including climate change.

A great many migratory species are of major direct and indirect importance for human well-being, including people's food security and livelihoods. Many human communities rely on the regular influx of migratory animals: as a basis for subsistence; for economically and/or culturally important hunting, fishing, tourism and recreation; or to maintain ecosystem function in a way that allows another resource to be harvested. Levels of use (of species or their habitats) by one community can significantly affect availability of the resource to communities in different, possibly distant, locations. The conservation and sustainable use of migratory species is therefore a key contribution to wider aims of sustainable development and requires global attention.

1.3 Scope of the SPMS

The Working Group considered that the SPMS would have more political impact and visibility when providing guidance at a strategic level. Enabling activities or instruments that concern *implementation* – an essential component of a successful and effective Strategic Plan – are addressed in a separate Companion Volume to support the implementation of the Plan.

The SPMS defines long-term and high-level outcomes in a way that allows progress toward them to be tracked and evaluated, and adaptive changes to be made as necessary.

The migration systems approach taken is reflected in the SPMS by clear references to: (1) migratory species; (2) their habitats and migration routes; and (3) threats to both. All elements are included in the targets to the extent possible.

The SPMS is designed to apply to migratory species as defined by the Convention, i.e. the entire population or any geographically separate part of the population of any species or lower taxon of wild animals, a significant proportion of whose members cyclically and predictably cross one or more national jurisdictional boundaries. This definition reflects the importance of concerted international action necessary to address

trans-boundary challenges associated with the conservation of migratory species. In addition, it invites meaningful engagement by all interested stakeholders – including CMS and its daughter instruments. The word "species" where it occurs in this Plan should be interpreted in line with the same definition, meaning that such references may apply to lower taxonomic levels when the context so requires.

The SPMS provides a broad framework that is capable of harnessing all related migratory species conservation efforts by the international community as a whole in the same direction (see Figure 2, which shows the scope and the context of the SPMS). In doing so it creates opportunities for greater coherence and visibility at national, regional and global levels in policy and political terms for these issues.

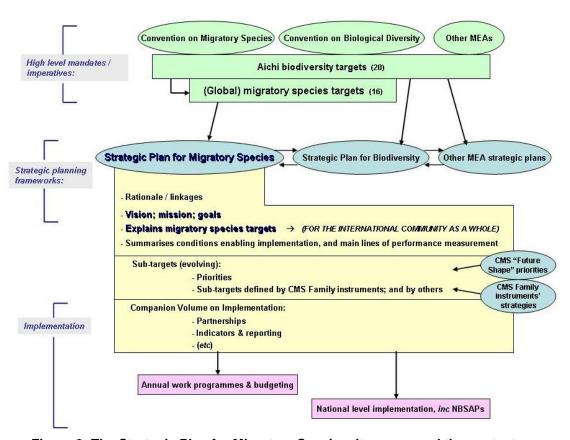


Figure 2: The Strategic Plan for Migratory Species: its scope and the context

Chapter 2. Vision and Mission

The purpose of the Strategic Plan for Migratory Species is to provide vision, leadership, and a driving force toward the full and effective implementation of goals and targets related to migratory species.

This SPMS aims to achieve the following vision:

"Living in harmony with nature – where populations and habitats of migratory species (along with all biodiversity) are valued, conserved, restored and wisely used, thereby contributing to global sustainability."

The following <u>Mission</u> guides the implementation of this Plan:

"To promote actions to ensure the favourable conservation status of migratory species and their habitats, and to ensure the ecological integrity, connectivity and resilience of migration systems."

Chapter 3. Strategic Goals and Targets

Goals

The five goals articulated below express strategic outcomes of this Plan. These include conservation outcomes and ways to measure them. Operational detail to support implementation is provided in a Companion Volume (see also chapter 4 below).

Targets

Under each goal, performance targets are provided that specify the scale and nature of the main tangible shifts required in each case. The purpose of the targets is to define priorities and to clarify what constitutes successful performance. Where applicable, this includes a quantifiable standard. Broadly derived from the Aichi Biodiversity Targets in the Strategic Plan for Biodiversity – so as to facilitate coherence with biodiversity-related activities (see **Annex A**) and support efforts during the UN Decade of Biodiversity – the SPMS goals and targets have been drafted to contribute to the objectives of the CMS instruments, retain a clear identity, and reflect the needs of migratory species. This means that each one has been independently re-examined in the context of conditions existing in 2014, and is based on judgements about achievability and the specific priority needs of migratory species in this context.

Nothing in this Plan shall be taken to dilute or reduce the commitments represented by the Aichi Biodiversity Targets. In general, each target should be achieved at global level within the timeframe set for the corresponding Aichi Target (see Annex A), where applicable. Individual governments may wish to set earlier deadlines for some or all of the targets according to their national circumstances. Adoption of specific national plans of action may assist in elaborating such matters.

Sub-targets

Certain key contributions to the delivery of the targets in this Plan can be defined in the form of subsidiary targets, addressing specific issues. In some cases, more specific aspects of a given target may be sufficiently well-defined (e.g., under one of the CMS daughter instruments, or another international process) so it is possible to distil specific sub-targets.

One important category of sub-targets relates to actions or processes which will be or are being undertaken in the context of one or more of the CMS "Family" of Agreements,

Memoranda of Understanding and Action Plans. Each governing body of those instruments can adopt such sub-targets where considered appropriate. This can for example take the form of specific targets on a particular species or an Action Plan, or Conservation & Management Plan with its own targets, which are considered supportive of - but distinguished from - the rest of the Strategic Plan in that respect. They are noted in a separate register maintained by the CMS Secretariat, and encourage an integrated approach to implementation of the Plan across the Family of instruments.

This picture will evolve, and further sub-targets are likely to be agreed in their own contexts. The register of sub-targets is therefore designed to be an open-ended list which will be updated from time to time. There is no implication that a sub-target necessarily needs to be defined in respect of any particular SPMS target or any particular instrument. Conversely, the sub-targets given at any one time do not necessarily represent the totality of commitments that may exist or may further need to be defined at this level.

Indicators

Core measurable indicators are included to track and account for progress towards the achievement of the targets. These are shown in **Annex B**, and are based on indicators devised for use with the corresponding Aichi Targets. Details on indicators (including achievement milestones) can be found in the implementation Companion Volume.

Goal 1: Address the underlying causes of decline of migratory species by mainstreaming relevant conservation and sustainable use priorities across government and society

Target 1: People are aware of the multiple values of migratory species and their habitats and migration systems, and the steps they can take to conserve them and ensure the sustainability of any use.

Note: "Awareness" here is intended to be more than passive, and to include positive support and engagement at political levels, as well as among the public. It includes awareness of the values represented by the phenomenon of migration itself. The values concerned may be socio-economic, including cultural, as well as ecological.

Target 2: Multiple values of migratory species and their habitats have been integrated into international, national and local development and poverty reduction strategies and planning processes, including on livelihoods, and are being incorporated into national accounting, as appropriate, and reporting systems.

Note: Actions towards this SPMS target may also contribute to SPMS target 13.

Target 3: National, regional and international governance arrangements and agreements affecting migratory species and their migration systems have improved significantly, making relevant policy, legislative and implementation processes more coherent, accountable, transparent, participatory, equitable and inclusive.

Note: Reference to governance "affecting" migratory species here indicates that this is not limited only to conservation governance, but extends to other levels/sectors that may also have an effect.

Target 4: Incentives, including subsidies, harmful to migratory species, and/or their habitats are eliminated, phased out or reformed in order to minimize or avoid negative impacts, and positive incentives for the conservation of migratory species and their habitats are developed and applied, consistent with engagements under the CMS and other relevant international and regional obligations and commitments.

Note: The precise approach to this will vary, in some cases sub-nationally, according to specific local circumstances.

Goal 2: Reduce the direct pressures on migratory species and their habitats

Target 5: Governments, key sectors and stakeholders at all levels have taken steps to achieve or have implemented plans for sustainable production and consumption, keeping the impacts of use of natural resources, including habitats, on migratory species well within safe ecological limits to promote the favourable conservation status of migratory species and maintain the quality, integrity, resilience, and ecological connectivity of their habitats and migration routes.

Note: Where there is uncertainty about what constitutes a "safe ecological limit" in a given case, a precautionary approach should be taken.

Target 6: Fisheries and hunting have no significant direct or indirect adverse impacts on migratory species, their habitats or their migration routes, and impacts of fisheries and hunting are within safe ecological limits.

Note: Achievement of this target will require that migratory species are managed and harvested sustainably, legally and through the use of ecosystem-based approaches. Overexploitation of migratory species must be avoided, and recovery plans and measures should be in place for all depleted species. Where there is uncertainty about what constitutes a "safe ecological limit" in a given case, a precautionary approach should be taken.

Target 7: Multiple anthropogenic pressures have been reduced to levels that are not detrimental to the conservation of migratory species or to the functioning, integrity, ecological connectivity and resilience of their habitats.

Note: The pressures concerned may include those relating to climate change, renewable energy developments, power lines, by-catch, underwater noise, ship strikes, poisoning, pollution, disease, invasive species, illegal and unsustainable take and marine debris.

Goal 3: Improve the conservation status of migratory species and the ecological connectivity and resilience of their habitats

Target 8: The conservation status of all migratory species, especially threatened species, has considerably improved throughout their range.

Note: Actions towards this SPMS target may also contribute to SPMS target 11.

Target 9: International and regional action and cooperation between States for the conservation and effective management of migratory species fully reflects a migration systems approach, in which all States sharing responsibility for the species concerned engage in such actions in a concerted way.

Note: The Convention on Migratory Species, being "concerned particularly with those species of wild animals that migrate across or outside national jurisdictional boundaries", emphasizes that "conservation and effective management of migratory species of wild animals require the concerted action of all States within the national jurisdictional boundaries of which such species spend any part of their life cycle". This would include the necessary capacity building as a key component of trans-boundary cooperation. Target 9 seeks more complete engagement by all of the States who share joint responsibility in such circumstances.

Target 10: All critical habitats and sites for migratory species are identified and included in area-based conservation measures so as to maintain their quality,

integrity, resilience and functioning in accordance with the implementation of Aichi Target 11, supported where necessary by environmentally sensitive land-use planning and landscape management on a wider scale.

Note: Aichi Target 11 states that "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".

Goal 4: Enhance the benefits to all from the favourable conservation status of migratory species

Target 11: Migratory species and their habitats which provide important ecosystem services are maintained at or restored to favourable conservation status, taking into account the needs of women, indigenous and local communities⁶, and the poor and vulnerable.

Note: The services concerned may include water supply, quality and regulation; disaster risk reduction; climate regulation; cultural services; food and other socio-economic benefits, all contributing to people's health, livelihoods and well-being. Actions towards this SPMS target may also contribute to SPMS target 8.

Target 12: The genetic diversity of wild populations of migratory species is safeguarded, and strategies have been developed and implemented for minimizing genetic erosion.

Note: Safeguarding actions may include maintenance of the original gene pool for migratory species that are managed under human care for re-introduction into the wild and other purposes, or are otherwise of socio-economic as well as cultural value.

Goal 5: Enhance implementation through participatory planning, knowledge management and capacity building

Target 13: Priorities for effective conservation and management of migratory species, their habitats and migration systems have been included in the development and implementation of national biodiversity strategies and action plans, with reference where relevant to CMS agreements and action plans and their implementation bodies.

Note: Other types of national plans and strategies, such as those for the implementation of other Multilateral Environmental Agreements or national development plans, may also be highly relevant. Even if they are not designed overtly to have biodiversity-related purposes, plans for issues such as land use, resource use, public health, disaster risk reduction, infrastructure distribution and economic development can include provisions that make an important difference to migratory species conservation. Actions towards this SPMS target may also contribute to SPMS target 2.

Target 14: The traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of migratory species, their habitats and migration systems, and their customary sustainable use of biological resources, are respected, subject to national legislation and relevant international obligations, with the full and effective participation of indigenous and local communities, thereby contributing to the favourable conservation status of migratory species and the ecological connectivity and resilience of their habitats.

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⁶ At the time of adopting this Plan, terminology for referring to indigenous people/peoples and local communities is under debate in other intergovernmental contexts. The wording in this Plan should not be taken to favour any one terminology over another.

Note: This target reflects international thinking on the subject in other fora.

Target 15: The science base, information, training, awareness, understanding and technologies relating to migratory species, their habitats and migration systems, their value, functioning, status and trends, and the consequences of their loss, are improved, widely shared and transferred, and effectively applied.

Note: The "science base" here does not relate only to new research and monitoring, but also to making better use of existing datasets (including improving their public availability), and improving the standardization of data collection protocols. In addition to investigation and understanding of specific events, phenomena, patterns and consequences, greater efforts may also be required to improve data on baseline conditions, so that meaningful assessments of significance, and assessments of change, can be made.

Target 16: The mobilization of adequate resources from all sources to implement the Strategic Plan for Migratory Species effectively has increased substantially.

Note: This target refers to resource mobilization in the broad sense including international and domestic funding from public, private and other sources. It however also implies policy choices that reduce the costs of improving the status of migratory species and thus also benefits from the correct implementation of Goals 1 and 2. Developing countries, least developed countries, small island developing states and countries with economies in transition have particularly acute needs in this regard. Resource flows to as well as within these countries need to increase, both through "north-south" and "south-south" cooperation.

Chapter 4. Enabling Conditions for Implementation

The successful achievement of the SPMS objectives depends on the commitment and engagement of Range States and other stakeholders. The SPMS was designed to maximize high-level political engagement in migratory species issues, and real impact will come from the willingness and commitment of all concerned to be imaginative, positive, collaborative, and determined to realize the adopted vision through their everyday actions in practice.

This needs to be supported by a range of organizational arrangements and implementation measures. Building on lessons learned from the implementation of the 2006-2014 CMS Strategic Plan, the present chapter describes the main areas in which suitable high-level conditions need to be created in order to enable the range of implementation measures required. This covers, in particular: delivery mechanisms, supporting infrastructure and performance assessment. In each of these areas a minimum level of human, technical and financial resources will be required if this plan is to succeed. To this end, the suggestions below should assist governmental and non-governmental actors to translate and integrate the global targets into their specific regional and national contexts.

More detailed guidance on the practical dimensions related to the implementation of the SPMS by all concerned stakeholders is provided in the Companion Volume on Implementation which accompanies this Strategic Plan. That Companion Volume is intended to help both country experts and other stakeholders to put in place and execute the necessary means of implementation towards reaching the goals and objectives of the SPMS.

1) Outreach, promotion and uptake of the Plan

The SPMS and its issues will be promoted by the entire CMS Family and CMS channels in order to raise awareness of the Plan and effect implementation of the targets.

The Plan expresses priorities that are shared at the global level, but it is also designed to frame a well-integrated response to those priorities at multiple scales. National planning processes therefore are indispensable in "translating" the Plan to different contexts. The existence of a robust agreed framework at global level should greatly assist such national

processes, for example by offering already-validated thinking that can be adapted, rather than having to be originated afresh. If national plans and policies are approached in this way, ensuring compatibility with the SPMS, proposals for international collaboration, and (where relevant) financial support, should have much greater chances of success.

2) The delivery framework

The Convention and the CMS Family of instruments have a specific role as a primary delivery framework for the SPMS, as well as their subsidiary bodies and national focal points.

Existing delivery mechanisms and activities include among others relevant CMS Family decisions, action plans, guidelines and programmes supporting the SPMS, including priorities for development of future CMS instruments and initiatives.

The SPMS should furthermore guide the COP when developing new instruments and tools to support the individual targets.

3) Key partnerships and other supporting delivery frameworks

Key partnerships to support delivery of the SPMS include those with other Conventions, civil society, the private sector and regional bodies. A wide range of civil society organizations and other stakeholders make an invaluable contribution to implementing the Convention and conserving migratory species. This large amount of work is often facilitated by governmental processes, and could usefully be reported by governments at the national and international levels.

4) Capacity development

The CMS Family, Parties and other stakeholders need to address capacity building needs relating to information, awareness, knowledge and understanding as covered in the strategic targets. This is supported in particular by implementation of the CMS Capacity Building Strategy. A further step in this direction is capacity development using the Manual for the National Focal Points for CMS and its Instruments - a capacity building tool to guide the national focal points of CMS and its instruments on their roles and responsibilities, helping them to make a more effective contribution to implementation.

5) Resourcing for biodiversity

As total funds currently committed to migratory species conservation are insufficient to achieve the full suite of goals and targets expressed in this Plan, creative mobilization of additional resources from all sources is required.

What matters about resource mobilization for biodiversity in the end is the amount of resources available for biodiversity. Those resources can be financial, human and technical, both domestic and international, and can come from a variety of sources.

"In-kind" support from the voluntary efforts of individuals and civil society at large can be expected to make a major contribution to scientific research, surveillance, awareness raising, and other areas of implementation. Innovations in knowledge management and information technology will also substantially increase the power of what can be done with available resources.

Target 16 addresses this at a headline level. It should be supported in particular by implementation of the Resource Mobilization Strategy adopted under the Convention on Biological Diversity (COP 9 Decision IX/11, 2008) and the associated targets agreed by COP11 in 2012 in Decision XI/4.

In this respect, it is important to keep in mind that resourcing for the implementation of the SPMS happens through several mechanisms, in particular through (i) the reduction of expenses, (ii) increasing the efficient use of the available resources and (iii) the generation of new resources, as discussed further below:

- i. The challenge of mobilizing resources is certainly about reducing the need for more resources in the first place. The need for resources for the targets depends highly on the policy choices made by key sectors. Different costing scenarios are therefore possible, depending on the sectoral policies. If less biodiversity is impacted negatively by national, regional and/or global policies, then fewer resources will be needed to protect or restore it. Examples from key sectors such as forestry, fisheries, agriculture and so on show that win-win situations for both the sector and biodiversity are possible and desirable when considered under a medium- to long-term perspective. Integration of migratory species issues into sectoral policies can support sustainable development and a more stable long-term basis. This can be done through increased allocations towards biodiversity activities but also through enhancing biodiversity aspects in sectoral policies and better engaging all actors, including key production sectors and the private sector.
- ii. Increased available funding also depends on the effectiveness, efficiency and sustainability of international and national financial flows for biodiversity. This needs the necessary institutional, national, administrative and managerial capacities to ensure the enabling environment for more effective, efficient and sustainable use of resources and to mobilize private and public-sector investments. Not every action to implement the Plan therefore costs money and some of the principles of efficiency and partnership espoused by this Plan actively facilitate a more efficient use of the available resources.
- iii. Finally, generating new resources will remain very necessary to achieve the implementation of the Plan. With the engagement of champions, ambassadors, philanthropists and skilled public relations specialists, the evocative cause of migratory species lends itself well to fundraising efforts at all levels. Guided by the SPMS, specific implementation activities may be clustered into appealing regional or thematic programmes for this purpose, or advertised in portfolios of costed projects.

6) Monitoring and evaluation, including indicators, milestones and feedback to the sub-targets, as well as headline measures of success by which overall success of the SPMS may be judged

The SPMS defines expected long-term and high-level outcomes in a way that allows the assessment of progress and results. Setting a direction is meaningless, if not followed by: evaluations of implementation; assessments of on-the-ground impacts; and calculations of 'return on investment'. In addition, a system of learning and adaptive management should be integral to the system.

To this end, **Annex B** outlines the scope of existing or planned indicators that should (to varying degrees) track progress toward individual SPMS targets. Further detail on these indicators is provided in the Companion Volume. To be credible, the monitoring and evaluation regime will need to be thorough, transparent, and trustworthy, with a clear (and plausible) sense of the logic of expected causal pathways between activities, outcomes, and impacts. Robustness and quality in this area may even be a way of providing some of the strength that most biodiversity-related conventions lack through the absence of compliance mechanisms.

Clear allocation of responsibility for the work required to operate various aspects of the indicators regime (and to develop relevant new measures, where required) is an important part of the conditions that enable good implementation of the Plan. [Initial leadership on this has been given in decisions of the 11th CMS COP in 2014].

Programmes of Work adopted under the CMS and action plans of CMS Family instruments may have their own indicators. There will be a need to ensure that appropriate linkages are made and advantage is taken of potential synergies between those and the indicators for the Strategic Plan.

In addition to target-by-target evaluation, it is expected that principal institutions (such as the CMS COP) will endeavour to evaluate overarching headline measures of success by which the overall success of this Plan may be judged as a whole.

7) Reporting on and review of progress at national level and by governing bodies such as the CMS COP

The SPMS provides goals, yet is also part of a cycle of feedback and adaptive management. Using information from indicators, the SPMS should provide a means toward efficient, effective, and meaningful reporting.

National reporting cycles, such as by Parties to Convention COPs, provide one means by which progress against the SPMS can be measured. These reports can help build a picture of progress toward achievement of the goals and targets of the SPMS, and can highlight areas for attention. Continued development of harmonized on-line reporting systems, as well as information provided by NGOs and civil society, will be important in this regard.

Annex A. Correspondence between SPMS and Aichi Targets

SPMS	Aichi Targets
Target 1	Aichi 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	Aichi 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	None
Target 4	Aichi 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 5	Aichi 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.
	Aichi Target 7: By 2020 areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity.
Target 6	Aichi 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
Target7	Aichi Target 8: By 2020, pollution, including from excess nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity.
	Aichi 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.
	Aichi 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.
Target 8	Aichi 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 9	None
Target 10	Aichi 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.
	Aichi 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 11	Aichi 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.
	Aichi Target 15: By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, thereby contributing to climate change mitigation and adaptation and to combating desertification.
Target 12	Aichi Target 13: By 2020, the genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives, is maintained, and strategies have been developed and implemented for minimizing genetic erosion and safeguarding their genetic diversity.

Target 13	Aichi 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 14	Aichi 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 15	Aichi 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 16	Aichi 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.
	CBD Resource Mobilization Strategy (COPIX/11) and the resource mobilization target (COPXI/4§7): "Double total biodiversity-related international financial resource flows to developing countries, in particular least developed countries and small island developing States, as well as countries with economies in transition, by 2015 and at least maintaining this level until 2020, in accordance with Article 20 of the Convention, to contribute to the achievement of the Convention's three objectives, including through a country-driven prioritization of biodiversity within development plans in recipient countries, using the preliminary baseline referred to in paragraph 6.

Annex B. Indicative Strategic Plan Indicators

A central part of the monitoring & evaluation regime for the Strategic Plan for Migratory Species is a suite of headline indicators, used to track progress towards the achievement of the goals and targets. The selection of appropriate measures for these is not simply a matter of identifying issues on which data can be generated, but involves careful thought as to the ability ultimately to generate adequate "storylines" on the success or otherwise of the Plan in securing genuinely strategic outcomes and real impacts for migratory species, rather than just indicators of process implementation.

Given that the SPMS has built upon the Aichi Targets in the Strategic Plan for Biodiversity, indicators already defined in support of the latter provide much of the basis for the measures identified here.

A primary source has therefore been the suite of indicators defined in 2011 by an Ad-Hoc Technical Expert Group (AHTEG) under the Convention on Biological Diversity, and reflected subsequently in the annex to CBD COP Decision XI/3 (October 2012). The AHTEG developed 12 headline indicator titles, each of which typically relates to several Aichi Targets. At a more specific level, it developed 97 operational indicators, for each of which a "most relevant Aichi Target" was identified.

In tandem with this process, the global Biodiversity Indicators Partnership (BIP) has classified its indicator list against the Aichi Targets. At the time of adoption of this Plan there were [29] BIP indicators.

One of the targets of the Strategic Plan for Migratory Species (target 3 on governance) has no direct Aichi equivalent; and some other issues go a little beyond existing biodiversity indicator regimes, such as ecological networks and factors affecting the migration process. Otherwise there has been no strong need to define new indicator topics, and the indicators listed below (elaborated in more detail in the Companion Volume on Implementation) are based on relating the AHTEG operational indicators and the BIP indicators to each of the targets in the SPMS, according to their links to relevant Aichi targets. Further work is needed to elaborate a "migratory species disaggregation" of the relevant existing or already-proposed biodiversity indicators, and in most cases to operationalize this.

The indicative list below identifies a priority selection of headline indicators that could be used (following further development, where necessary) to track progress towards achievement of the targets in the Migratory Species Strategic Plan.

SPMS Target	Headline Indicator
Target 1:	Potentially operable in the short term:
	Levels of engagement in World Migratory Bird Day and similar events
	This could measure numbers of events reported, or number of countries in which active events occur. In certain countries where a given event is repeated in a standard way from year to year, data on numbers of people or media coverage may also be available.
	For possible future development:
	Trends in awareness and attitudes to migratory species
	This is based on one of the AHTEG biodiversity indicators, although it is one that is not yet operational. There is an existing "Biodiversity Barometer" BIP indicator, but data for that will not be able to generate this indicator, since the Barometer is based on testing awareness of the

	definition of the word biodiversity. Development of a new indicator would therefore be required. This might be examined in conjunction with any revision/rolling forward of the CMS Outreach and Communication Plan.
Target 2:	Potentially operable in the short term:
	• (None)
	For possible future development:
	Trends in integration of migratory species values in national and sectoral policies.
	The CMS National Report Format currently asks whether the conservation of migratory species features in national or regional policies/plans, and an indicator might be developed from that foundation (accepting that this method will give an incomplete picture, given that the target applies equally to non-CMS Party countries). Addressing migratory species through NBSAPs, which is effectively a sub-indicator of this indicator, is also specifically covered in the Report Format but belongs instead under SPMS target 13 below. Similar sub-indicators could perhaps however be considered here, e.g. for PRSPs and other globally standardized policy instruments of relevance.
Target 3:	Potentially operable in the short term:
	• (None)
	For possible future development:
	 Activity status/viability of CMS Family of instruments (Other governance-related indicator on CMS implementation).
	The first suggested indicator here would aim to assess the coherent governance of the CMS Family structure, by perhaps measuring the proportion of instruments which are actively and sustainably operating as intended. Metrics for this might be derived from the MoU viability study conducted in 2014.
	The exact scope of the second indicator remains to be elaborated, and depends on the extent to which it proves possible to develop a governance-related performance effectiveness indicator linked specifically to implementation of the CMS (being the most relevant governance framework). There would be complexities in establishing benchmarks for matters which are for national political discretion. The most promising prospect may lie with the existing encouragement for CMS Parties to establish and operate national liaison systems or committees (target 4.5 in the 2006-2014 CMS Strategic Plan). The Convention's National Report Format asks a question on this, but at present it is simply a yes/no question as to the existence of such a system or committee (and will give an incomplete picture, given that the target applies equally to non-CMS Party countries).
Target 4:	Potentially operable in the short term:

• (None)

For possible future development:

• (CMS National Report Format question, to ask about progress in implementing target 4).

The migratory species conservation community will want to pay attention to information reported on incentives and biodiversity in general under the two relevant indicators defined by the CBD AHTEG; but it is difficult to see how the data on those could be meaningfully disaggregated to tell a story that is specific to migratory species. Occasional case studies might be able to do so, but probably not a globally-applicable, regularly-reported indicator. The suggested route to follow for an indicator therefore is to collate narrative information in a standardized way via CMS Party National Reports, focusing the question on the migratory species dimension (and accepting that this method will give an incomplete picture, given that the target applies equally to non-CMS Party countries).

Target 5:

Potentially operable in the short term:

Status of migratory species in trade.

This indicator is proposed as a migratory species "cut" of the corresponding BIP indicator (which is said to be ready for use). As well as generating stories about the species concerned, comparisons will be possible between the migratory species sub-set and the trends for all species. The indicator addresses exploitation of migratory animals themselves, and thus does not really speak to the sense in which the target addresses impacts on such species from exploitation of *other* resources (that dimension may have to be caught instead by proxies defined under other targets). Nonetheless it may offer useful data on more direct exploitation (and is relevant to cooperation between CMS and CITES). NB the "footprint" indicators listed against the corresponding Aichi targets (4 and 7) are ecosystem-based and do not lend themselves to separating out any specific migratory species storylines.

For possible future development:

• (None)

Target 6:

Potentially operable in the short term:

Proportion of migratory fish stocks in safe biological limits.

This indicator is proposed as a migratory species "cut" of the corresponding BIP indicator, which is said (by both BIP and AHTEG) to be ready for use; and is an indicator referred to by many international instruments e.g. the Law of the Sea, the UN Fish Stocks Agreement, the Code of Conduct for Responsible Fisheries, and the MDGs.

For possible future development:

• (None)

Monitoring of some other aspects of this target, including hunting impacts, may be picked up through indicators defined for targets 5, 7 and 8.

Target 7:

Potentially operable in the short term:

- Trends in threats to migratory species (overall).
- Trends in threats to migratory species (sub-indicators on specific threat types)

These indicators require some development, but doing so should be a priority, and while the question is complex, it should be possible to generate at least some useful data on a regular basis. Isolating migratory species threats from existing monitoring systems could be complex, and monitoring trends in e.g. distribution of "obstacles to migration" may not necessarily be usable proxies for actual impact, so those angles are problematic. CMS National Reports however generate information on threats specifically relating to migrants, and although the information is rough and anecdotal (and will give an incomplete picture, given that the target applies equally to non-CMS Party countries), it may provide a pragmatic entry-point. Other threat monitoring systems should be examined for the scope to extract a migratory species "cut" of their data.

Sub-indicators on specific threat types may in some cases be the easier starting-point and will have useful specificity for targeting policy responses. The "overall" indicator is important too however, since target 7 is mainly concerned with the additive nature of all threats (and it is instructive to detect trends in the relative importance of different types).

(Extinction risk here is regarded as a state indicator rather than a pressure indicator, so is better considered under target 8).

For possible future development:

Further sub-indicators on additional/more specific threat types.

Target 8:

Potentially operable in the short term:

- Red List Index for migratory species.
- Living Planet Index for migratory species.
- Wild Bird Index for migratory birds.

The three indicators proposed here are seemingly feasible sub-sets of existing indicators currently in operation (for details see BIP). Reporting should be designed so as to cross-refer specifically (where appropriate) to the CMS Appendices and/or Appendices in CMS daughter instruments.

For possible future development:

• Trends in distribution of migratory species.

This proposal is based on an indicator that is a CBD "priority to be developed", and addresses the key element of favourable status for migrants which relates to maintenance of range. Graduated measurement of this for most species will be difficult; but a crude index to begin with might be built on a basis of changes in the regularly-maintained CMS lists of Range States for Annex-listed species. This is unlikely to show any but the most drastic and time-lagged changes; and the Range State list updating process suffers from some quality control issues which would also need to be addressed. The method could potentially be adapted for use for example at the level of sub-national administrative regions.

Target 9:

Potentially operable in the short term:

(None)

For possible future development:

 Trends in range-related coverage of migratory species agreements and other concerted actions between States

This indicator requires development. A large component of it (though not necessarily all) could begin from existing information on the ratification status of CMS Family Agreements, formal Concerted and Cooperative Actions and Species Action Plans in the framework of the CMS. To operationalize the indicator for this target however will require the additional step of relating this information to data on species ranges. since the purpose is to show completeness of international participation in respect of each of the species concerned. Range data are already collated under CMS auspices at the level of Range State lists, although this suffers from some quality control issues which would need to be addressed. The indicator title is necessarily abbreviated; but "other concerted actions" should be understood as embracing action plans and equivalents (i.e. not only the specific "concerted actions" mechanism as formally established by CMS); and "coverage" should be understood as (potentially at least) embracing both geographical coverage and a measure of active engagement by Range States.

Target 10:

Potentially operable in the short term:

(None)

For possible future development:

- Trends in conservation status, including connectivity, of identified habitats of key importance for migratory species.
- Coverage of key habitats for migratory species in protected areas.
- Management effectiveness of areas protected specifically for

migratory species.

The first of these three indicators picks up on the AHTEG indicator "Trends in the connectivity of protected and other area based approaches integrated into land and seascapes". It will require development. Its feasibility poses considerable challenges, such as devising a valid method for systematically identifying habitats with this specific relevance, deciding how to measure changes in connectivity, and relating this meaningfully to impacts on migratory species.

Indicators of fragmentation of forests and rivers are already under discussion in a wider biodiversity context, but translating these into effects on migration is difficult.

The migratory species conservation community will want to pay attention to information reported on more general indicators of particular habitat types and ecosystem trends which are associated with the corresponding Aichi Target 5, but there appears to be no good rationale upon which to propose a "cut" of any of those which could isolate migratory species factors.

Concerning the second and third issues listed above, it may be possible to develop some kind of indicators as sub-sets of the corresponding three more generic BIP indicators on these subjects, which are all classed as ready for use (with the "coverage" and "overlays" BIP indicators both contributing to the first of the two migratory species proposals above). Isolating the components that relate specifically to migratory species however will require considerable work, and is likely to be challenging. One way to disaggregate the existing management effectiveness indicator data might be to separate out all sites covered by it which are included in flyway sites networks (and to apply the methodology to such sites where they are not already assessed for this).

Further elaboration of an approach to this also depends on addressing issues relating to absent or uncertain baselines for the quantitative elements of the corresponding Aichi target, and for the totality for sites regarded as critically important for migratory species.

The worthwhileness of investing in these indicators may need careful evaluation.

Target 11:

Potentially operable in the short term:

• (None)

For possible future development:

 Trends in delivery of ecosystem services directly dependent on migratory species.

The proposed indicator is a composite of the most relevant components of the CBD and BIP indicators which are matched to the Aichi target (14) that corresponds to this proposed migratory species target, and which include some that are ready for use and some that are in development. Work would be required to define relevant selected services, to isolate and specify cause-effect dependence on named migratory species, and to

devise parameters for measurement that are linked to this dependence and do not simply repeat the species-status assessments which are already the subject of target 8 above. The proposal addresses this by aiming to measure benefits that are derived by people rather than the status of the species, although this extrapolates slightly beyond the strict scope of the target (which goes only as far as securing the *potential for* benefit).

The development of ecosystem services indicators is very challenging; but it might be possible to isolate particular services from particular migratory species to act as a sample of this issue. It would be preferable to select something that is not direct consumptive use, since that is covered under other indicators; so perhaps eg pollination or grazing-related services would be the priority.

Target 12:

Potentially operable in the short term:

 Strategies of relevance to migratory species developed and implemented for minimizing genetic erosion.

Given the difficulty in devising a realistic outcome indicator for the target, the most feasible course is probably to report on the "means objective" forming the second part of the target. Limiting this to strategies addressing only migratory species might narrow the scope too strictly; hence the reference in this instance only to strategies that are "of relevance" to migratory species.

For possible future development:

(None likely to be feasible).

Existing indicators are not well suited to addressing genetic erosion in wild animals. This may be a case where progress towards the outcome of a Strategic Plan target can only be assessed by "exception reporting", i.e. maintaining reactive vigilance and perhaps annual reminder checks to document any instances of notable moves towards or away from the defined target state.

Target 13:

Potentially operable in the short term:

 Trends in attention to migratory species in National Biodiversity Strategies and Action Plans.

The CMS National Report Format currently asks whether migratory species are addressed by each country's NBSAP, and an indicator could be developed from that foundation (accepting that this method will give an incomplete picture, given that the target applies equally to non-CMS Party countries). It is likely that it would only go as far as tracking the presence or absence of references to migratory species in NBSAPs, since this is all that most Parties are likely to report in response to the existing National Report question.

For possible future development:

 Trends in integration of migratory species concerns in National Biodiversity Strategies and Action Plans. This goes further than the first indicator defined above, by addressing not just presence or absence of reference to migratory species, but the manner in which migratory species concerns are integrated into the Strategy/Action Plan. "Trends" perhaps overstates the position, since it is likely that this would be based on occasional qualitative assessment of NBSAP content with this specific question in view, and the most that might be expected is a comparison between a moment early in the timespan of the SPMS and a moment at or near the end of its time-span.

Target 13 is effectively a sub-target of target 2 above, and the indicator would therefore operate as a sub-indicator of the indicator proposed there.

Target 14:

Potentially operable in the short term:

(None)

For possible future development:

 Trends in the degree to which traditional knowledge and practices are respected through full integration, participation and safeguards in national implementation of the Strategic Plan for Migratory Species.

This indicator is modelled on one of the CBD AHTEG proposals for the corresponding Aichi Target 18 (listed as a "priority for development"), but here referring to the Migratory Species Plan rather than the Biodiversity Plan. The "knowledge and practices" at issue would similarly need to be more specific to migratory species matters.

The most pragmatic way to develop this indicator might be to add a question to the CMS National Report Format (accepting that this method will give an incomplete picture, given that the target applies equally to non-CMS Party countries). This would need careful wording and a scaled response, rather than just yes/no.

Target 15:

Potentially operable in the short term:

• (None)

For possible future development:

• Trends in publication of papers on migratory species conservation in peer-reviewed literature.

A method of globally measuring this indicator requires development, perhaps by defining internet and database search protocols. The indicator does not address the "effective application" part of the target, but an operable way of doing that is not easy to see. The relevant CBD AHTEG and BIP indicators (not yet in use) refer more specifically to subglobal assessments and species inventories - both of these are included in the interpretation of "publications" here, provided they are peer-reviewed; but the indicator here is intended not to be so narrowly prescribed as the AHTEG/BIP ones are.

Target 16:

Potentially operable in the short term:

(None)

For possible future development:

 Trends in official funding for actions which support implementation of the Strategic Plan for Migratory Species.

Indicators defined for the CBD Resource Mobilization Strategy (and listed there as "priorities for development") might suggest that a suitable indicator for this target could be developed in relation to aggregated annual international flows of funding for achieving the goals of the SPMS, and something similar for the national level. During the development of the SPMS, however, considerable doubt was cast on the feasibility of making such indicators operable, at least for in terms of disaggregating the "migratory species" dimension of biodiversity.

The indicator suggested here, although crude and partial, may therefore be the most that can be expected. It would address major documentable instances of support for migratory species conservation programmes and projects, ideally where a link to one or more SPMS targets is explicit. This could include specific relevant instances of funding by multilateral bodies such as the GEF, and support from governments for actions under the CMS and its Family of instruments, among other actions. There is a significant methodological challenge in defining appropriate baselines for 2015, and this will also require attention.