AGREEMENT ON THE CONSERVATION OF AFRICAN-EURASIAN MIGRATORY WATERBIRDS

5th SESSION OF THE MEETING OF THE PARTIES
14 – 18 May 2012, La Rochelle, France

"Migratory waterbirds and people - sharing wetlands"

RESOLUTION 5.13

CLIMATE CHANGE ADAPTATION MEASURES FOR WATERBIRDS

Recalling Resolutions 3.17 on *Climate change and migratory waterbirds* and 4.14 on *The effects of climate change on migratory waterbirds* complementing this resolution and the request in the latter for the Technical Committee to identify further research priorities to inform future adaptation measures, and also to assess whether existing international networks of sites are sufficient to sustain migratory waterbird populations, including the projected climate change effects, and, in the light of this work, to propose to MOP5 which additional complementary approaches - if necessary - should be taken,

Recalling also the endorsement by MOP4 of *AEWA Guidelines on measures needed to help waterbirds to adapt to climate change* as guidance for the Contracting Parties,

Noting the need, expressed in Article III of the Agreement, for Contracting Parties to identify networks of sites and habitats for migratory waterbirds, and to protect, manage, rehabilitate and restore these as essential actions to maintain the favourable conservation status of species,

Aware of the Ramsar Convention's Resolution X.24 (2008) on *Climate change and wetlands* which *inter alia*, urged or encouraged Ramsar Parties to:

- manage wetlands wisely to reduce the multiple pressures they face and thereby increase their resilience to climate change and to take advantage of the significant opportunities to use wetlands wisely as a response option to reduce the impacts of climate change,
- promote the restoration of river, lake and aquifer basins and their wetlands as an important aspect of policy related to climate change, and to
- promote integrated coordination in developing and implementing national policies related to water management, agriculture, energy production, poverty reduction, and human health, in order to ensure that sectoral objectives are mutually supportive in addressing the likely negative impacts of climate change and that such objectives are consistent with the need to protect the ecological character of wetlands and maintain wetland services,

Aware also of Resolutions 9.7 (2008) on *Climate change impacts on migratory species* and 10.19 (2011) *on Migratory species conservation in the light of climate change* of the Convention on Migratory Species (CMS), which *inter alia*, called on CMS Parties and others to:

- identify and carry out research on the interactions of climate change and migratory species, including the impact on habitats and local communities dependent on the ecosystem services provided by these species,
- to develop and implement monitoring regimes that are adequate for distinguishing true declines in populations from transboundary range shifts and for analysing the impact of climate change on migratory species, *inter alia*, through the following measures,

a. ensuring that monitoring is maintained in the long term, using comparative methodologies, and

b. communicating and sharing monitoring results regularly with neighbouring and other Range States,

- to improve the resilience of migratory species and their habitats to climate change by reducing other threats in order to maintain or increase population size and genetic diversity as well as to achieve the following objectives among others,

    a. to ensure that individual sites are sufficiently large, holding a variety of habitats and topography;

    b. to strengthen the physical and ecological connectivity between sites, aiding species dispersal and colonisation when species distributions shift, and

    c. to consider the designation of seasonal protected areas in areas where migratory species occur at critical stages in their lifecycle and would benefit from extra protection,

Aware also of assessments by some Contracting Parties of the modelled changes in future distributions of migratory waterbirds consequent on changed climate, and the implications such changes have for national, and hence international networks of protected areas.

The Meeting of the Parties:

1. *Adopts* the framework annexed to this Resolution as further guidance for actions related to national adaptation measures related to the conservation of waterbirds and their wetland and other habitats; and *urges* Contracting Parties to implement these principles in their implementation of the Agreement;

2. *Encourages* Contracting Parties to complete the identification of relevant areas and build national networks of protected areas and other adequately managed areas; to undertake national assessments of the resilience of these sites both individually and collectively; and to report such assessments to future Meetings of the Parties;

3. *Urges* Contracting Parties to report to the Sixth Meeting of the Parties to AEWA (MOP6) on adaptation measures relevant to migratory waterbirds which have either been undertaken or are planned, and *instructs* the Secretariat - working inter-sessionally with the Technical and Standing Committees - to develop simple but informative reporting frameworks to this end and implement this for MOP6;

4. *Urges* Contracting Parties and others to make full use of existing guidance from the Ramsar Convention on the wise use of wetlands (available in Ramsar's *Handbooks for the Wise Use of Wetlands),* much of which is applicable to many of the threats and impacts to wetlands arising from climate change, in developing their policies and adaptations to climate change impacts on wetlands;

5. *Requests* the Technical Committee to review and summarise relevant studies and policies related to climate change and migratory waterbird conservation and management, especially with respect to the creation and management of networks of protected and managed sites and other adequately managed sites, and to bring such an overview to MOP6;

6. *Further requests* the Technical Committee in future to work collaboratively with both the Ramsar Convention's Scientific and Technical Review Panel, and the Scientific Council of CMS, on issues of common concern related to impacts of climate change on wetlands and their dependent migratory waterbirds so as to develop common guidance for the Contracting Parties whenever possible; and

7. *Urges* National Focal Points for Technical Committee matters to engage in, and contribute to, work by the Technical Committee in order to contribute national and regional issues and expertise from their in-country networks of waterbird scientists and other experts.

ANNEX I: An AEWA guidance framework for climate change adaptation[1]

Five main adaptation principles are fundamental to conserving biodiversity in a time of rapid climate change:

The precautionary principle should underpin all of these.

Many elements of these principles are neither new nor specific to climate change adaptation; they underpin existing policy and practice in nature conservation. However, climate change creates a new imperative to understand and work with the dynamics of natural systems. The complex interactions between people and their natural environment must be managed to maintain the services and benefits that society derives from biodiversity and ecosystems. These will be increasingly important and threatened as the climate changes.

[1] This framework is developed, with acknowledgement, from Smithers, R.J., Cowan, C., Harley, M., Hopkins, J.J., Pontier, H. & Watts, O. 2008. *England Biodiversity Strategy: Climate Change Adaptation Principles. Conserving biodiversity in a changing climate.* DEFRA, UK. http://archive.defra.gov.uk/environment/biodiversity/documents/ebs-ccap.pdf

	Existing relevant AEWA and other guidance
Principle 1: Take practical action now	
The speed and scale of climate change require action now. We cannot know exactly how the climate will change or how it will impact directly or indirectly on species, habitats and ecosystems, particularly at a local scale. We cannot wait until the evidence demonstrates greater certainty, as delay will result in more severe impacts, fewer available options for action and increased costs of damage and intervention. This is because of the length of time it will take to implement adaptation action and for biodiversity to respond. Existing conservation efforts are insufficient and there is a need to act now with greater vigour to:	
Conserve existing biodiversity The richness of future biodiversity, even in a changing world, will depend largely upon the biodiversity we conserve today.	
Conserve protected areas and all other high quality habitats These areas will remain important because they have characteristics that will continue to favour high levels of biodiversity. They are key ecological components of wider terrestrial, freshwater and marine ecosystems.	Paragraph 3.2 of AEWA Action Plan on conservation of areas Ramsar Handbook for the wise-use of wetlands no. 17: *Designating Ramsar Sites* Ramsar Handbook for the wise-use of wetlands no. 18: *Managing wetlands* Ramsar Handbook for the wise-use of wetlands no. 19: *Addressing change in wetland ecological character*
Reduce sources of harm not linked to climate Climate change is one of many threats to biodiversity. By reducing other sources of harm we will help natural systems maintain their biodiversity in the face of climate change.	

	Existing relevant AEWA and other guidance
Use existing biodiversity legislation and international agreements Existing legal and policy frameworks should be used to enable effective action now while working with policy-makers to remedy any potential shortcomings.	Ramsar Handbook for the wise-use of wetlands no. 20: *International cooperation*
Principle 2: Maintain and increase ecological resilience	
Increasing the resilience of ecosystems to the impacts of climate change, will help the widest range of biodiversity to survive and adapt. Ecological resilience 'depends on a dynamic relationship within species, among species and between species and their abiotic environment, as well as the physical and chemical interactions within the environment' (Convention on Biological Diversity, 2000). It is vital to continue and extend current efforts to:	
Conserve range and ecological variability of habitats and species It is impossible to predict which localities will continue to have climatic conditions suitable for a given species or habitat. Diversity of terrestrial, freshwater and marine ecosystems, in terms of physical features and habitats, should be maintained. This will increase the chances that species whose current habitat becomes inhospitable will be able to spread locally into newly favourable habitat.	
Maintain existing ecological networks Further habitat fragmentation and isolation should be avoided by maintaining sympathetic management of terrestrial, freshwater and marine ecosystems and implementing appropriate spatial planning.	Ramsar Handbook for the wise-use of wetlands no. 17: *Designating Ramsar Sites* AEWA Strategic Plan 2009 – 2017 (Objective 1 Target 1.2)

	Existing relevant AEWA and other guidance
Create buffer zones around high quality habitats High quality habitats can be buffered from potential negative edge effects by reducing the occurrence of damaging activities in their immediate vicinity. For example, this may be achieved on land by creating the same or complementary habitats adjacent to them.	Paragraph 3.3 of AEWA Action Plan on rehabilitation and restoration
Take prompt action to control spread of invasive species The establishment of invasive species known to cause significant habitat degradation or loss of other species should be prevented where action can be sustained.	AEWA Guidelines on Avoidance of Introductions of non-native Waterbird Species
Principle 3: Accommodate change	
Climate change brings into sharp focus the need to manage for the future and adopt an increasingly dynamic approach to conservation. Both gradual change and extreme weather events will shape the places where species occur. Species populations will change and move, affecting other species and habitats. The past will not provide a guide to the future due to the rate and magnitude of change expected. There is a need to:	
Understand that change is inevitable The structure and composition of habitats has never been static. Species will respond individualistically to climate change and we should seek to work with the grain of change and natural processes.	

	Existing relevant AEWA and other guidance
Make space for the natural development of rivers and coasts Changing rainfall patterns and rising sea levels will affect our rivers and coasts. By recognising the role of erosion and deposition in shaping the environment, we can increase the potential for species and habitats to adapt naturally to these changes.	
Establish ecological networks through habitat restoration and creation Some species will need to move some distance from their current locality if they are to survive climate change. The success of species dispersal can be promoted by enhancing protected areas and creating new habitat, restoring degraded habitat, and sympathetically managing areas between existing habitats in the wider environment.	Paragraph 3.3 of AEWA Action Plan on rehabilitation and restoration AEWA Strategic Plan 2009 – 2017 (Objective 1 Target 1.2)
Aid gene flow The ability of a species to adapt to change is correlated with genetic diversity and population size, so conservation should seek to maintain or create large populations. Gene flow between populations is desirable but care may be required where small populations have been isolated for a long period and local genetic variation may be swamped.	
Consider the role of species translocation and ex-situ conservation Translocation (introduction, reintroduction and restocking) and captive-breeding programmes may be used to conserve some species, as appropriate. Large-scale translocations may be impractical.	AEWA Recommended best practice for the conservation of threatened waterbirds through action planning and re-establishment (Resolution 4.4) which was based on Review of waterbird re-establishment projects AEWA Guidelines for the Translocation of Waterbirds for Conservation Purposes: Complementing the IUCN Guidelines

	Existing relevant AEWA and other guidance
Develop the capacity of institutions and administrative arrangements to cope with change and learn from experience We must learn to be effective in a changing and uncertain world. This will require a cultural shift to work positively towards a future of potentially different circumstances, learning from experience, and sharing information more widely within and between organisations, whilst retaining consistent objectives.	AEWA Guideline series African Initiative for the conservation of migratory waterbirds and their habitats in Africa (Resolution 4. 9)
Respond to changing conservation priorities Conservation targets need to be regularly reviewed to ensure resources are directed towards conservation priorities as some species increase, others decline and habitats change in character.	Ramsar Handbook for the wise-use of wetlands no. 3: *Laws and institutions*
Principle 4: Integrate action across partners and sectors	
Adaptation policy across all sectors needs to be built on a foundation of healthy and resilient ecosystems. Different sectors of society view biodiversity and ecosystems in terms of their own economic, cultural and societal needs. Biodiversity is critical both for its intrinsic value and because of the key role it plays in providing the ecosystem and other services upon which we all ultimately depend. Yet competing economic uses of land, water resources and the marine environment usually undervalue biodiversity and natural systems, sometimes with widespread incentives and subsidies that lead to damage to the environment. The scale of adaptation required demands that biodiversity conservation is integrated with economic activities on land and at sea. There is a need to:	
Integrate adaptation and mitigation measures Biodiversity conservation can contribute to carbon management; for example, as a result of peatland restoration or native woodland creation. Mitigation should not harm biodiversity and should recognise opportunities for biodiversity, thereby contributing to adaptation.	

	Existing relevant AEWA and other guidance
Integrate policy and practice across relevant economic sectors Adaptation measures for biodiversity should be explicitly linked with the wider benefits that they bring. Governments should ensure that planning for national adaptation is integrated across different sectors and that adequate environmental safeguards are built into adaptation responses across all policy sectors. Projected needs of migratory species should be integrated within all relevant policies especially National Biodiversity and Species Action Plans, Protected Area policy and management plans, and National Adaptation Policies and plans. Conservation organisations can assist in demonstrating and catalysing action for biodiversity across all relevant economic sectors. In this way, conservation can be interwoven with other activities for effective delivery of ecosystem goods and services.	Ramsar Handbook for the wise-use of wetlands no. 5: *Partnerships*
Build and strengthen partnerships Partnerships between the public and private sectors should form a fundamental part of the process of developing climate change adaptation strategies from the outset. Engagement with stakeholders and local communities is crucial to developing adaptation actions that will work best on the ground.	Ramsar Handbook for the wise-use of wetlands no. 5: *Partnerships* Ramsar Handbook for the wise-use of wetlands no. 7: *Participatory skills*
Raise awareness of benefits of the natural environment to society and adopt an ecosystem approach to conservation Wider appreciation that adaptation for biodiversity is in the interests of individuals, communities and businesses will lead to demand and support for implementation. This should build on recognition of environmental services provided by biodiversity and ecosystems and an appreciation that safeguarding ecosystems supporting migratory birds can reduce vulnerability and enhance adaptive capacity of people to climate change.	AEWA Communications Strategy Ramsar Handbook for the wise-use of wetlands no. 6: *Wetland CEPA*

	Existing relevant AEWA and other guidance
Principle 5: Develop knowledge and plan strategically	
We cannot know exactly how the climate will change or its precise impacts on biodiversity but we do know the general trends and some specific species responses. We have to plan for the future with available information, developing techniques that will enable us to move forward with actions that we will not regret whatever the future may bring. Simultaneously, we must strive to learn more about the impacts of climate change on biodiversity and ecosystems and to monitor the effectiveness of adaptation.	
Undertake vulnerability assessments of biodiversity and associated ecosystem goods and services without delay Vulnerability to climate change is 'the degree to which a system is susceptible to, or unable to cope with, adverse effects of climate change, including climate variability and extremes' (Intergovernmental Panel on Climate Change, 2007). Assessing vulnerability will help to identify priorities and develop appropriate actions.	
Undertake scenario planning and implement no regrets actions There is a need to make strategic decisions by embracing uncertainty and addressing the full range of likely variation in projected changes and their impacts. It is important to avoid selection of one preferred future in the hope that it will become true.	
Pilot new approaches and monitor New approaches to conservation management need to be piloted and monitored at a large scale and within a time period commensurate with the challenge.	
Identify potential win-win solutions and ensure cross-sectoral knowledge transfer	

	Existing relevant AEWA and other guidance
Win-win solutions are policies and measures that deliver several adaptation measures at once or that also bring other social and economic benefits.	
Monitor actual impacts and research likely future impacts Gaining knowledge of actual and projected impacts of climate change on biodiversity is essential to help shape and adapt conservation action.	
Improve understanding of the role of biodiversity in ecosystem services Implementing an ecosystems approach requires a better understanding of the benefits provided by biodiversity and ways in which ecosystem services will be affected by climate change.	
Research knowledge gaps with stakeholder participation Climate change adaptation has cross-sectoral implications. Ensuring stakeholders have a common understanding of and commitment to new evidence is essential to develop policy and practice.	