

Agenda item 8.13

Future implementation of scientific and technical aspects of the Convention

Action requested: The Standing Committee is invited to review the attached draft Resolution and its annexes and to advise on its finalization for consideration by COP10.

Note by the Ramsar Secretariat

1. During its 14th meeting, the Scientific and Technical Review Panel (STRP) made an initial review and proposals for its future tasks and priorities amongst those tasks for the 2009-2011 triennium, and it initiated the development of a draft Resolution similar to that adopted at the 9th meeting of the Conference of the Contracting Parties as Resolution IX.2.
2. Further work to develop the attached draft Resolution has followed STRP14 by means of a review of STRP's mandates in Resolution IX.2 that are either ongoing or have otherwise not yet been completed, a strategic review and identification of future and emerging issues and priorities voiced during STRP discussions, and additional tasks identified for the STRP in other draft Resolutions for COP10, including in the draft Strategic Plan 2009-2014.
3. The Standing Committee should note that the attached draft Resolution (DR) is currently a 'work in progress' and that the STRP will be further reviewing its contents and priorities and providing cost estimates for each of its proposed priority tasks for the 2009-2011 triennium. An update on this will be provided to SC37.
4. Following decisions on other DRs and any relevant amendments to their text made by the 37th meeting of the Standing Committee, the Secretariat and STRP will further revise and harmonize the contents of the annexes to the present draft Resolution for COP10 consideration.
5. Two annexes are provided to the attached DR.
 - i) Annex 2 lists all currently identified tasks for the ongoing and future work of the STRP, organized under ten broad thematic issue-based topics.
 - ii) Annex 1 provides a summary list (with abbreviated task descriptions) of those tasks from Annex 2 that the STRP is recommending to Standing Committee and COP10 as High Priority tasks. For each of these it will provide an estimate of the costs for undertaking the required work.
6. There are two differences in the arrangement of these Annexes from the treatment in Resolution IX.2.

7. First, in Resolution IX.2, in addition to identification of High Priority tasks, a small number of those High Priority tasks were designated as “Immediate Priority” with the intent that these should, resources permitting, be the first to be initiated during the triennium. The STRP’s experience has been that this coding has caused some confusion as to the distinction between High and Immediate priorities, and the Panel proposes that the identification of which High Priority tasks should be worked on first (i.e., the Panel’s immediate priorities) should be left to the first meeting of the Panel in the next triennium, in the context of the STRP’s development of its Work Plan for SC approval. This would permit the Panel to address this matter in the light of its available capacity and resources, which will be better known by that time.
8. Second, Annex 2 to Resolution IX.2, in addition to tasks for STRP, also included sections of scientific and technical implementation tasks for others, including Contracting Parties. In reviewing this aspect of Resolution IX.2, however, the Secretariat and Panel were doubtful about the value of including these lists and whether they have been useful to Parties and others in guiding their scientific and technical implementation of the Convention. Equivalent sections have not been included in the attached Annex 2.
9. As formulated at present, the DR will expressly supersede those aspects of Resolution IX.2 which address the work and priorities of the STRP, but not the parts of Resolution IX.2 Annex 2 concerning the activities for others.
10. The Standing Committee may wish to provide advice on whether a) some Immediate Priority tasks should be identified and b) whether lists of implementation actions for ‘others’ should be added to Annex 2 of the DR. One option concerning issue b) could be to make available to Contracting Parties at COP10 an Information Paper providing an updated list of such activities, for their use as appropriate. A number of activities of this kind, in particular key scientific and technical result areas for Parties and others, also appear in the draft Strategic Plan 2009-2014.
11. Finally, in its earlier discussions the STRP examined whether it was possible and appropriate to organize and group its future tasks in relation to the various Strategies listed in the draft Strategic Plan 2009-2014 in order to show where its work and products fit in to the overall future strategic implementation of the Convention. If the Standing Committee considers that such a listing would be helpful, this might be done by either adding to the new Strategic Plan a list of STRP task numbers under each Strategy and its key result areas or by preparing an Annex 3 to the attached draft Resolution providing the task numbers organized in this way.

Draft Resolution X.00

Future implementation of scientific and technical aspects of the Convention

1. RECALLING Resolution IX.2, in which the Contracting Parties for the first time adopted a complete, unified and prioritized programme of scientific and technical implementation activities for a triennium, and AFFIRMING that experience indicates this to have been an efficient and effective way of providing an overall picture of such activities, for planning work, deciding further priorities, and allocating resources;
2. HAVING REGARD TO Resolution IX.11 on the revised *modus operandi* of the Scientific and Technical Review Panel (STRP), as updated and refined by [draft Resolution X.00] adopted by the present meeting of the Conference of the Contracting Parties;
3. AWARE that it has not been possible to progress significant elements of STRP's priority work in the 2006-2008 triennium and that full delivery of the Panel's programme remains subject to resources, in particular to voluntary contributions from Parties and others; and
4. THANKING WARMLY those Parties and organizations that have contributed financially and in kind to the work of the STRP in the 2006-2008 triennium;

THE CONFERENCE OF THE CONTRACTING PARTIES

5. APPROVES the high priority actions for the STRP for the 2009-2011 triennium in Annex 1 to this Resolution and ALSO APPROVES the list of tasks in Annex 2 as the basis for a forward work programme for the Panel;
6. INSTRUCTS the Secretariat to consolidate into Annex 2 to this Resolution, as appropriate, any additional scientific and technical implementation actions for the STRP arising from other Resolutions adopted by the present meeting of the Conference of Parties;
7. CONFIRMS that this Resolution supersedes all those aspects of Resolution IX.2 and its Annexes relating to the implementation work of the STRP; and
8. URGES Parties, donors, intergovernmental agencies, International Organization Partners, national NGOs, and others to use this programme, including the costed programme for high priority STRP actions in Annex 1 to this Resolution, in deciding priorities for their financial and other material support towards the scientific and technical implementation of the Ramsar Convention.

Annex 1

High priority tasks for the STRP for the 2009-2011 triennium, and estimated costs for their delivery

1. The following [26] tasks and their estimated costs have been recommended by the Scientific and Technical Review Panel (STRP) and COP10 as priority activities for its work plan for the 2009-2011 triennium. These cover the following topics:
 - Participation of STRP National Focal Points
 - Use of CEPA expertise
 - A global system for wetland observation
 - The Framework for information needs on Ramsar sites and other wetlands
 - Describing ecological character
 - The Information Sheet on Ramsar Wetlands
 - Indicators of effectiveness
 - Follow-up to the Millennium Ecosystem Assessment
 - Wise use case studies
 - Wetlands and extractive industries
 - Highly Pathogenic Avian Influenza
 - Wetlands and human health
 - Wetlands and climate change
 - Water quality issues
 - Water resources management in dry and sub-humid lands
 - Review of COP Resolutions on water and wetlands interactions
 - Review of the targets and guidelines that support the Ramsar Criteria
 - Biogeographical regionalisation schemes
 - Targets for representation of wetland types in the Ramsar List
 - The ecological significance of human-made wetlands
 - Mitigation of and compensation for wetland losses
 - Restoration and rehabilitation of lost or degraded wetlands
 - Training and capacity building for stakeholders in Contracting Parties

2. Provisional estimated costs are based on each task requiring the engagement by the STRP of an expert (or experts) to undertake the work required. Estimated costs have been provided by the STRP and its expert Working Groups – more precise costings and ways and means for the delivery of these tasks, not all of which may prove to require such funded expert consultancies, will be developed at the beginning of the 2008-2011 triennium through the mechanisms established under the revised STRP *modus operandi* (Resolution IX.11, as refined by [draft Resolution X.00]) and reported to the Standing Committee.

3. Provisional estimated costs for the [26] 2009-2011 *High Priority* tasks are CHF [amount to be added].

4. Abbreviated titles for most tasks are given in this annex. Reference should be made to the relevant numbered task in Annex 2 for a fuller description of each task.

1. “Ongoing” functions of the STRP

Task and product	Provisional estimated cost (Swiss francs)
1.4 Continue to strengthen the role and participation of STRP National Focal Points in the work of the Panel	
1.7 Ensure that the preparation, promotion and use of STRP guidance and advice materials draws fully on expertise available to the Convention concerning Communication, Education, Participation and Awareness (CEPA)	
Subtotal:	

2. Issues relating to wetland inventory, assessment, monitoring and reporting

Task and product	Provisional estimated cost (Swiss francs)
2.2 Draw up a specification for a global system for wetland observation (G-WOS),	
2.3 Update and further develop the Convention’s <i>Framework of information needs for Ramsar sites and other wetlands</i> ; produce a companion document identifying actions and action gaps, and make use of the <i>Framework</i> in relation <i>inter alia</i> to harmonisation, project review, and future development of the Ramsar Sites Information Service	
2.4 Develop further the Convention’s guidance on describing the ecological character of wetlands	
2.5 Prepare proposals for re-structuring and/or revising the format of the Information Sheet on Ramsar Wetlands (RIS) and its accompanying Explanatory Notes and Guidelines, to take account of relevant decisions and recommendations of COP10	
2.8 Assist the Secretariat in operationalising the first tranche of Ramsar indicators of effectiveness of implementation of the Convention agreed by COP9	
2.9 Further develop, test and put forward for use the second tranche of indicators of effectiveness of the implementation of the Convention agreed by COP9	
Subtotal:	

3. Issues relating to the general wise use of wetlands

Task and product	Provisional estimated cost (Swiss francs)
3.1 Continue to develop ways in which to further promote and utilize to best effect the findings of the Millennium Ecosystem Assessment, especially those concerning response options	
3.2 Prepare advice on maximizing the utility of case studies prepared in recent years on aspects of wetland wise use	
3.4 [Task to be defined from DR on Wetlands and extractive industries, once prepared]	
3.11 Maintain an active overview of and input to issues relating to Highly Pathogenic Avian Influenza	
Subtotal:	

4. Issues relating to wetlands and human health

Task and product	Provisional estimated cost (Swiss francs)
4.1 Investigate further the links between wetlands and human health and well-being, including development of reports for the health sector, assessment of wetland-health interactions, conceptual work on health of ecosystems, identification of knowledge gaps, profile-raising for Ramsar sites with positive health values, and preparation of guidance on wetland co-management	
Subtotal:	

5. Issues relating to wetlands and climate change

Task and product	Provisional estimated cost (Swiss francs)
5.1 Develop guidance on the latest knowledge of the current and potential impacts of climate change on wetlands, and on appropriate policy and management responses	
5.2 In conjunction with the Ramsar Secretariat, develop a leading role with relevant international conventions and agencies in the development of a coordinated programme of work to investigate the potential contribution of wetland ecosystems to climate change mitigation	

and adaptation	
Subtotal:	

6. Issues relating to water resources management

Task and product	Provisional estimated cost (Swiss francs)
6.3 Develop guidance on water quality issues related to wetlands, building on the materials collated and drafted during the 2006-2008 triennium	
6.6 Develop guidance on water resources management in dry and sub-humid lands, including aspects relating to climate change and desertification, in consultation with the Convention on Biological Diversity and the UN Convention to Combat Desertification	
6.8 Review all adopted Ramsar COP Resolutions concerning water and wetlands interactions, and make recommendations concerning consolidation, updating and retiral of operative aspects of these Resolutions in light of recent developments	
Subtotal:	

7. Issues relating to Wetlands of International Importance (Ramsar sites)

Task and product	Provisional estimated cost (Swiss francs)
7.2 Conduct a thorough review and make proposals concerning the consistency, completeness, logic, coherence and clarity of the targets, guidelines and other materials that support the implementation of the Ramsar Criteria	
7.4 Develop a web-based portal to downloadable GIS-based information on the biogeographical regionalisation schemes reviewed during the 2006-2008 triennium, and investigate further the usefulness of other existing schemes for supporting the application of the <i>Strategic Framework and guidelines for the future development of the List of Wetlands of International Importance</i>	
7.5 Develop advice on identifying and addressing under-representation in the Ramsar List, and investigate methods for defining targets for representation	

of wetland types in the List	
7.6 Review the ecological significance of reservoirs and other human-made wetlands, and prepare further guidance concerning the identification and designation of such wetlands for the Ramsar List	
Subtotal:	

8. Issues relating to wetland mitigation, restoration and compensation

Task and product	Provisional estimated cost (Swiss francs)
8.1 Develop guidance on mitigation of and compensation for losses of wetland area and wetland values	
8.2 Prepare proposals for updating and expanding existing Ramsar guidance on restoration and rehabilitation of lost or degraded wetlands, including links with climate change and economic values of ecosystem services	
Subtotal:	

9. Issues relating to communication, education, participation and awareness (CEPA)

Task and product	Provisional estimated cost (Swiss francs)
9.3 Develop effective ways of providing training and capacity building for relevant stakeholders in Contracting Parties to assist with the interpretation and implementation of guidance and other materials prepared by the STRP	
Subtotal:	

TOTAL PROVISIONAL ESTIMATED COSTS for 2009-2011: CHF [amount to be added]

Annex 2

Full list of tasks for the Scientific and Technical Review Panel

Note: References in brackets after each listed task give the main origins/sources of mandates for the task. Where a mandate from the COP9 scientific and technical priorities Resolution (Resolution IX.2) remains relevant, the Resolution IX.2 reference is given without (in most cases) specifying its antecedents. Giving such a reference does not necessarily mean that the wording here is a verbatim transcription of the wording in Resolution IX.2.

[Editorial note: References to COP10 DRs will be updated following COP to the actual confirmed Resolution numbers]

The tasks identified as “HIGH PRIORITY”, and highlighted in Annex 1, are those which the STRP should, resources permitting, start working on as soon as possible. Certain other tasks listed here (e.g. tasks 1.1, 1.2 and 1.3) are also recognised as essential to undertake, but they will be addressed throughout the triennium as and when the need arises.

List of thematic sections in this Annex

1. “On-going” functions of the STRP
2. Issues relating to wetland inventory, assessment, monitoring and reporting
3. Issues relating to the general wise use of wetlands
4. Issues relating to wetlands and human health
5. Issues relating to wetlands and climate change
6. Issues relating to water resources management
7. Issues relating to Wetlands of International Importance (Ramsar sites)
8. Issues relating to wetland mitigation, restoration and compensation
9. Issues relating to communication, education, participation and awareness (CEPA)
10. Emerging issues, and other sectoral concerns

1. “On-going” functions of the STRP

- 1.1 Review and comment on proposals from Parties for COP Resolutions with technical content, and provide this advice to the Standing Committee and COP.
(Resolution IX.2 task 1)
- 1.2 Provide both proactive and reactive advice to the Convention on relevant strategic scientific and technical matters, including overall progress with scientific and technical aspects of the implementation of COP Resolutions, trends, emerging issues, and other priority matters requiring expert review.
(Resolution IX.2 tasks 2 & 3)
- 1.3 Continue to provide advice under the following specifically requested functions:
 - i) advising, when requested, on Ramsar site designation and management issues, including on Article 3.2 reports concerning change in ecological character;

- ii) advising the Secretariat on requests from Contracting Parties for removing Ramsar sites from the Montreux Record of sites facing damaging change in ecological character;
- iii) advising on any request from a Contracting Party to participate in the activities of a different Ramsar region to that which it is assigned under the regional categorization of the Convention;
- iv) upon request, assisting Contracting Parties and bilateral development agencies in screening, developing and evaluating wetland projects;
- v) receiving progress reports and advising on future needs and developments of the Ramsar Sites Information Service; and
- vi) ensuring cooperation, exchange of information, and coordination of activities, where appropriate, with the scientific and technical subsidiary bodies (and their related processes) of other MEAs and relevant regional fora, through actions defined in Joint Work Plans, through the Chairs of Scientific Advisory Bodies (CSAB) process and by other means, with a view *inter alia* to: promoting cross-adoption and endorsement of principles, guidance, resolutions; sharing work programmes in order to identify common areas, gaps and opportunities for joint work; and improving scientific collaboration in general.

(Resolution VIII.28; Resolution IX.11, Resolution IX.2 task 4, [COP10 DR X on Partnerships and synergies with Multilateral Environmental Agreements and other institutions], [draft] Strategic Plan 2009-2014 strategies [1.5, 3.1])

1.4 Continue to strengthen the role and participation of STRP National Focal Points (NFPs) in the work of the Panel, *inter alia* by:

- i) enhancing the methods for and frequency of regular contacts between Panel Members and NFPs;
- ii) identifying opportunities and mechanisms for holding intersessional regional or sub-regional meetings of NFPs;
- iii) compiling improved information on the interests and expertise of all NFPs;
- iv) engaging the NFPs in the identification of relevant national experts who may, in relation to specific individual STRP tasks, be able to review draft documents and make other inputs as appropriate;
- v) at the request of a given Administrative Authority, involving their NFP in monitoring and evaluating any SGF projects in that country;
- vi) keeping the terms of reference and modus operandi of STRP NFPs under review, with a view to identifying potential future improvements and to providing any further guidance to NFPs that may be required.

(Resolution VIII.28; Resolution IX.11, Resolution IX.2 task 4, [COP10 DR X on Refinement of the modus operandi of the STRP]).

HIGH PRIORITY

1.5 In addition to specific tasks listed elsewhere in the present Annex concerning the Ramsar site Criteria, keep the Criteria and Guidelines as a whole under review on an on-going basis to ensure that they reflect global wetland conservation and wise use priorities.
(Resolution IX.2 task 112).

1.6 Periodically secure the updating (by other qualified bodies where appropriate) of the list of relevant population estimates and 1% thresholds for the application of Ramsar site Criteria 6 and 9.
(Resolution IX.1 Annex B, STRP14)

- 1.7 Ensure that the preparation of STRP guidance and advice materials draws fully on expertise available to the Convention concerning Communication, Education, Participation and Awareness (CEPA) in order to optimize the effective drafting, design, targeting and uptake of such materials; and ensure that CEPA experts also contribute to promoting and researching uptake of such materials and the scientific and technical profile of the Convention in general, including the on-going documentation of lessons learned.

(Annex to Resolution IX.11, Resolution IX.2 task 152)

HIGH PRIORITY

2. Issues relating to wetland inventory, assessment, monitoring and reporting

- 2.1 Prepare a summary update report on the status of global and regional wetland inventories, referring as appropriate *inter alia* to the update of the *Global Review of Wetland Resources and Priorities for Wetland Inventory* (GroWI-2), the WSSD Type II partnership with FAO-GTOS, web-based dissemination of regional inventories and directories, and other relevant collaborations in particular those with earth observation agencies; and including appropriate recommendations on methodologies, coverage gaps, harmonization, awareness and knowledge-exchange.

(Resolution IX.2 task 51, STRP14, [draft] Strategic Plan 2009-2014 strategy [1.2])

- 2.2 Draw up a specification for a global system for wetland observation (G-WOS), which would:

- i) draw on collaboration, data and analyses from relevant earth observation programmes and agencies, the WSSD Type II partnership with FAO-GTOS, the Millennium Ecosystem Assessment and other relevant sources;
- ii) include elements of a web-based wetland inventory meta-database; and
- iii) serve to support relevant Ramsar effectiveness indicators (primarily indicator A(i) on status and trends in ecosystem extent) and other needs specified in Resolution X. [COP10 DR X on Data and information needs for management of wetlands], including those relating to inventory and wetland condition associated with agriculture, climate change and human health.

(Resolution IX.2 task 50, STRP14, [COP10 DR X on Data and information needs for management of wetlands], [draft] Strategic Plan 2009-2014 strategies [1.2, 2.2])

HIGH PRIORITY

- 2.3 In relation to [COP10 DR X on “A framework for Ramsar data and information needs”]:
- i) update and further develop the Convention’s Framework for Ramsar data and information needs, drawing on implementation experience, end-user perspectives, and on analysis of further needs defined in the decisions of COP10; and in particular in relation the data and information needs for identification and designation of Ramsar sites;
 - ii) to produce a companion document identifying actions and action gaps of relevance to meeting the needs defined in the Framework at different scales; and
 - iii) to make use of the Framework *inter alia* to inform harmonisation/interoperability activities with other MEAs; construction/prioritisation of relevant project proposals either developed or supported by the Ramsar Convention; and the future development of the Ramsar Sites Information Service.

(Resolution IX.2 task 52, STRP14, [COP10 DR X on “A framework for Ramsar data and information needs”]).

HIGH PRIORITY

- 2.4 Develop further the Convention's guidance on describing ecological character ([COP10 DRX on Describing wetland ecological character, and data needs and formats for core inventory: harmonized scientific and technical guidance]), to include, to the extent practicable:
- i) further operational guidance for practitioners on completing the ecological character description sheet for sites;
 - ii) guidance and information on using relevant conceptual models;
 - iii) cross-references, where available, from each relevant description sheet data field to worked examples, case studies or other appropriate sources of potential, actual or *de facto* standards for completing the fields; and
 - iv) a review of practical implementation experiences, with lessons learned; (STRP14, [COP10 DR X on Describing wetland ecological character, and data needs and formats for core inventory: harmonized scientific and technical guidance]).
- HIGH PRIORITY**
- 2.5 Review options for and prepare proposals for re-structuring and/or revising the format of the Information Sheet on Ramsar Wetlands (RIS) and its accompanying Explanatory Notes and Guidelines to take account of the recommendations in [COP10 DR X on Describing wetland ecological character, and data needs and formats for core inventory: harmonized scientific and technical guidance, other relevant decisions adopted by COP10, other requirements (including protocols regarding transboundary sites), and the outcome of other tasks listed in the present Annex which relate specifically to the RIS, including (but not necessarily limited to) the tasks on Ramsar site criteria, ecological character description and Ramsar site information needs. (Resolution IX.2 task 106, STRP14, [COP10 DR X on Describing wetland ecological character, and data needs and formats for core inventory: harmonized scientific and technical guidance]).
- HIGH PRIORITY**
- 2.6 In the context of Article 3.2 and the guidance in the Annex to [COP10 DR X on Detecting, reporting and responding to change in ecological character], develop further guidance on issues including:
- a) "limits of acceptable change", including guidance on defining the range of natural variability of a site;
 - b) determining confidence limits and degree of likelihood in cases of "likely" change in the context of Article 3.2; and
 - c) the application of a precautionary approach in the Ramsar Convention. (STRP14, [COP10 DR X on Detecting, reporting and responding to change in ecological character]).
- 2.7 Prepare advice on redesigning the Montreux Record questionnaire, to ensure consistency with the recommendations in [COP10 DR X on Describing wetland ecological character, and data needs and formats for core inventory: harmonized scientific and technical guidance] and [COP10 DR X on Detecting, reporting and responding to change in ecological character: scientific and technical guidance], and to take account of other perceived priority requirements. (Resolution IX.2 task 56, STRP14).
- 2.8 Assist the Secretariat in operationalising the first tranche of Ramsar indicators of effectiveness of implementation of the Convention agreed by COP9, including implementation of Indicator Collaboration Agreements, publishing and disseminating results and conclusions, contributing to 2010 biodiversity target activities and other relevant assessments, and reporting to Standing Committee and COP11.

(Resolution IX.1 Annex D, Resolution IX.2 task 59, STRP14, [COP10 DR X on Indicators of effectiveness of the implementation of the Convention], [draft] Strategic Plan 2009-2014 strategy [2.6]).

HIGH PRIORITY

- 2.9 Further develop, test and put forward for use by Parties and others as appropriate the second tranche of indicators of effectiveness of the implementation of the Convention agreed by COP9.

(Resolution IX.1 Annex D, Resolution IX.2 task 60, STRP14, [COP10 DR X on Indicators of effectiveness of the implementation of the Convention], [draft] Strategic Plan 2009-2014 strategy [2.6]).

HIGH PRIORITY

- 2.10 In ways which are complementary and supplementary to the work on effectiveness indicators specified in other tasks in the present Annex above, assist the Secretariat, Standing Committee and Parties in relation to the scientific and technical aspects of their monitoring and assessment of the performance of the Convention through the Key Result Areas defined in the Ramsar Convention Strategic Plan 2009-2014, and assessment of information in COP National Reports.

(STRP14, [COP10 DR X on the Ramsar Strategic Plan 2009-2014]).

- 2.11 Prepare an analysis of the status and trends in the ecological character of sites in the Ramsar List, set as far as possible in the context of the status and trends of wetlands more generally and drawing as appropriate on the Ramsar Sites Database, the Convention's indicators of implementation effectiveness, and the results of the Millennium Ecosystem Assessment and other assessment initiatives, and seeking in turn to contribute to relevant assessment processes including those relating to international 2010 biodiversity targets.

(Resolution IX.2 tasks 57 and 58, [draft] Strategic Plan 2009-2014 strategy [1.2]).

3. Issues relating to the general wise use of wetlands

- 3.1 Continue to develop ways in which to further promote and utilize to best effect the findings of the Millennium Ecosystem Assessment, especially those concerning response options, and in particular by developing Ramsar guidance on response options which address broad implementation themes not currently covered by the toolkit of Ramsar Wise Use Handbooks, including (but not limited to) nutrient cycling, food, and climate change, and including advice on responses at sub-global scales.

(Resolution IX.2 task 13, STRP 14, [COP10 DR X on The application of response options from the Millennium Ecosystem Assessment (MA) within the Ramsar Wise Use Toolkit]).

HIGH PRIORITY

- 3.2 Prepare advice on maximizing the utility, both to the STRP and others, of case studies prepared in recent years on aspects of wetland wise use, to include proposals for the design of appropriate web-based resources to assist in making such case studies more widely available.

(STRP14).

HIGH PRIORITY

- 3.3 In the light of the outcomes of the "Comprehensive Assessment on water management in agriculture" (CA), the "Water for food and ecosystems" initiative and the "Guidelines on Agriculture and Wetland Interactions" (GAWI), develop an updated review of needs

and any consequent proposals for testing of existing guidance and/or development of new guidance on wetlands and agriculture, in the context of Resolution VIII.34. (Resolution IX.2 tasks 149 and 150, STRP 14).

3.4 [Place-holder for adding STRP tasks from the anticipated DR on Wetlands and extractive industries. (Elements of the DR, but not a draft, will be presented to SC37. DR text then to be tabled at COP under the emerging issues provision)]. May include:

- i) development and testing of guidance on assessment of vulnerability of Ramsar sites and other wetlands to change in ecological character resulting from extractive industry activities, including recommendations on knowledge-exchange involving the Ramsar International Organisation Partners and others;
- ii) development of guidance on innovative extraction techniques and industry good practice in relation to wetland values, including links to guidance on environmental impact assessment and strategic environmental assessment, and links to other tasks in the present Annex concerning wetland restoration

(STRP14, [COP10 DR X on Wetlands and extractive industries]).

HIGH PRIORITY

3.5 Conduct a scoping review of the implications for wetlands of energy generation and distribution activities, covering both the conventional and renewable energy sectors, having regard to issues concerning climate change and wetlands, linking as appropriate to work done in relation to the task on extractive industries defined separately in the present Annex above, and taking account of up to date evolving policy perspectives in these sectors and on issues of energy security in general.

(STRP14, [COP10 DR X on Wetlands and biofuels])

3.6 Conduct a scoping review of technical aspects of relevance to the Ramsar Convention in the finance, banking, investment, insurance and other economic sectors, with a view to developing enhanced understanding of the implications for wetland-related policy and decision-making of economics-based approaches to investment and insurance risk analysis, tradeoffs, incentives, perverse incentives, modelling, forecasting, water and wetland commodities pricing, trade in wetland products, flood risk management, floodplain planning controls, health costs and benefits, and other aspects, taking into account evolving perspectives on valuation of wetland ecosystem services, having regard to opportunities for raising awareness of wetland issues in the financial sector, and taking into account the *Framework for comprehensive ecological and economic partnerships between the Ramsar Convention and the business sector* annexed to [COP10 DR X on a Framework for comprehensive ecological and economic partnerships between the Ramsar Convention and the business sector].

(Resolution IX.2 task 167, STRP14).

3.7 Conduct further investigations into the most appropriate form and specific scope of scientific and technical guidance that may be required to support implementation of Resolution IX.14 on Wetlands and poverty reduction.

(Resolution IX.14, Resolution IX.2 task 19, [COP10 DR X on Wetlands and poverty reduction]).

3.8 In the light of advice from Contracting Parties through their appointed STRP National Focal Points, consider the preparation of guidance for Contracting Parties on issues specific to the planning and management of urban and peri-urban wetlands.

(STRP14, [COP10 DR X on The conservation and management of urban wetlands]).

- 3.9** Review remaining needs and gaps in guidance relating to wetlands and fisheries, taking account of the materials produced to date in response to tasks 17 and 18 in Resolution IX.2, and prepare advice on what further scientific and technical guidance may be required, if any, with a suggested work plan for its completion.
(STRP14).
- 3.10** Conduct a brief scoping review of needs, options and opportunities for development of advice on scientific and technical aspects of tourism, sustainable tourism, ecotourism and other recreational activities in relation to wetlands.
(Resolution IX.2 task 164, STRP14).
- 3.11** Maintain an active overview of and input to issues relating to Highly Pathogenic Avian Influenza (HPAI), especially in relation to surveillance, information-exchange and response strategies, including by continued participation in the Scientific Task Force on Avian Influenza and Wild Birds, and including a determination of whether lessons learnt from best practice responses to HPAI H5N1 have implications for Ramsar guidance relating to protected sites and other aspects of wetland wise use, followed by the development of any necessary proposals for modifying such guidance.
(Resolution IX.23, Resolution IX.2 task 62, STRP14, [COP10 DR X on Guidance on responding to the continued spread of highly pathogenic avian influenza H5N1]).
HIGH PRIORITY
- 3.12** Contribute as appropriate to joint efforts with the Secretariat and the Secretariats and subsidiary bodies of the Convention on Migratory Species, the Agreement of African-Eurasian Waterbirds and other interested organizations to establish a mechanism for sharing knowledge and experience on best practices in the development and implementation of flyway-scale waterbird conservation policies and practices, including successful means of disseminating critical supporting data and information to stakeholders and others.
([COP10 DR X on Promoting international cooperation for the conservation of waterbird flyways], [draft] Strategic Plan 2009-2014 strategy [3.5]).
- 3.13** Prepare comprehensive and up-to-date global guidance on invasive species in relation to wetlands and their management, in cooperation with the Global Invasive Species Programme (GISP) and other relevant organizations.
([Strategic Plan 2009-2014 strategy [1.8]]);

4. Issues relating to wetlands and human health

- 4.1** Investigate further the links between wetlands and human health and well-being, in particular by:
- i) developing, from the STRP's 2008 report and other relevant sources, further products for the human health sector concerning human health and wetlands;
 - ii) further assessing the interactions between wetland ecosystems and their services, and human health and well-being, having regard also to the human health dimension of the task defined separately in the present Annex above concerning Highly Pathogenic Avian Influenza;
 - iii) developing interpretations and conceptual thinking in a Ramsar context of the applicability or otherwise of "health" to wetland ecosystems, the relationship of wetland ecosystem health to the concepts of ecological character and ecosystem services, and the implications for implementing and monitoring wise use and

- ecological character objectives under the Convention, taking into account both socioeconomic and ecological considerations;
- iv) identifying gaps in knowledge and information on wetlands and human health for different regions, and identifying ways and means of filling such gaps;
 - v) identifying opportunities to promote the value of Ramsar sites which have high positive values for human health; and
 - vi) preparing guidance for wetland managers and the human health sector on processes for identifying appropriate responses to the co-management of wetlands and human health issues, including trade-offs and including application of health impact assessment approaches, increased transparency of information, representation of marginalized stakeholders, and engagement with the core business of other sectors such as water management.
- (STRP14, [COP10 DR X on Wetlands and human health and well-being]).

HIGH PRIORITY**5. Issues relating to wetlands and climate change**

- 5.1** Develop guidance on the latest knowledge of the current and potential impacts of climate change on wetlands, and on appropriate policy and management responses for addressing these impacts, including *inter alia*:
- i) (building on initial work done in the 2006-2008 triennium), further development of methods for assessment of hydro-ecological impacts of climate change on wetlands, including the testing of such methods in data-poor areas;
 - ii) a review of wetland distribution in relation to land use and population distribution trends, in order to demonstrate potential effects on human health if wetlands are lost due to climate change impacts;
 - iii) guidance on how wetland management and restoration can contribute to improving adaptation to climate change (linking as appropriate with the other tasks on wetland restoration and rehabilitation defined separately elsewhere in the present Annex).
- (STRP 14, [COP10 DR X on Climate change and wetlands]).

HIGH PRIORITY

- 5.2** In conjunction with the Ramsar Secretariat, develop a leading role with relevant international conventions and agencies, including CBD, UNCCD, IPCC, UNEP, UNDP, FAO and World Bank, in the development of a coordinated programme of work to investigate the potential contribution of wetland ecosystems to climate change mitigation and adaptation, in particular for reducing vulnerability and increasing resilience to climate change, and in addition:
- i) establish ways and means of working with the UNFCCC and other relevant bodies to develop guidance for the development of mutually supportive adaptation and mitigation programmes that recognize critical role of wetlands in relation to water and food security as well as human health;
 - ii) bring wetlands and climate change issues to the attention of the Chairs of the Scientific Advisory Bodies of the Biodiversity-related Conventions (CSAB) at the next available opportunity, and utilize this forum to encourage enhanced scientific collaboration on issues related to climate change;
 - iii) establish ways of collaborating with the IPCC and of contributing to its future work so as to raise the awareness of the climate change community regarding the

importance of wetlands, including through the preparation and publication of relevant scientific reports on wetlands and climate change.
(STRP 14, [COP10 DR X on Climate change and wetlands]).

HIGH PRIORITY

- 5.3 Working with FAO and other interested organizations, review existing best management practice guidance in relation to growing of biofuels, and consider preparation of further guidance for Contracting Parties on addressing biofuel issues in relation to wetlands and water.
([COP10 DR X on Wetlands and biofuels]).

6. Issues relating to water resources management

- 6.1 Review, to the extent practicable, available experience in implementation of river basin management plans, including experience in applying national laws on environmental flows, and document the lessons emerging.
(STRP14).
- 6.2 Investigate ways of making optimal use of existing collated case studies for illuminating good practice concerning river basin management, integrated coastal zone management and national laws on environmental flows and other water management issues, with reference to relevant volumes in the Ramsar Wise Use Handbooks series.
(STRP14, [draft] Strategic Plan 2009-2014 strategy [1.6]).
- 6.3 Develop guidance on water quality issues related to wetlands, building on the materials collated and drafted by the STRP during the 2006-2008 triennium, and with a view to integrating the final outputs into the Ramsar *Integrated Framework for the Ramsar Convention's water-related guidance*.
(Resolution IX.2 task 91, STRP14).
- HIGH PRIORITY**
- 6.4 Prepare a technical report on wetlands and groundwater interactions, to provide further information and expanded guidance for supporting the implementation of the Resolution IX.1 Annex C ii *Guidelines for the management of groundwater to maintain wetland ecological character*.
(Resolution IX.1 Annex C ii, Resolution IX.2 task 90; STRP14).
- 6.5 Review possible options for development or synthesis of guidance on optimizing the operation of dams and other water management infrastructure (including flood defence and flood alleviation systems) for the benefit of upstream and downstream wetland ecosystems, having regard also to emerging perspectives on water storage in relation to security of supply of water, food and energy *inter alia* in the context of climate change, and making links as appropriate with the task defined separately in this Annex below concerning the ecological roles played by reservoirs and other human-made wetlands.
(STRP14).
- 6.6 Develop guidance on water resources management in dry and sub-humid lands, including aspects relating to climate change and desertification, in consultation with the Convention on Biological Diversity in the context of the Ramsar-CBD Joint Work Plan, and in consultation with the UN Convention to Combat Desertification.
(Resolution IX.2 task 86, STRP14).

HIGH PRIORITY

- 6.7 Review needs and possible options for development of guidance on the determination of environmental water requirements for palustrine wetlands.
(Carried forward from STRP 2003-5 work plan, STRP14).
- 6.8 Building on work done through the Standing Committee in the 2006-2008 triennium under Resolution IX.17 on the Review of the decisions of the Conference of the Contracting Parties, review all adopted Ramsar COP Resolutions concerning water and wetlands interactions, make recommendations concerning consolidation, updating and retreat as appropriate of operative aspects of these Resolutions in light of recent developments, and prepare for COP11 consideration a new draft Resolution concerning water and wetlands issues, including any necessary updating of the *Integrated Framework for the Ramsar Convention's water-related guidance* adopted by COP9 in Resolution IX.1 Annex C. (STRP14, [COP10 DR X on Wetlands and river basin management: consolidated scientific and technical guidance]).

HIGH PRIORITY**7. Issues relating to Wetlands of International Importance (Ramsar sites)**

- 7.1 Following, and in light of, the findings of the general review of the availability and utility of the Convention's scientific and technical guidance undertaken during the 2006-2008 triennium, conduct a more detailed and specific review of user needs in relation to the Convention's guidance on selection of Ramsar sites for particular wetland types, and the effectiveness of the guidance in meeting those needs; and develop proposals for any improvements or additions that may be necessary.
(Resolution IX.2 task 107, STRP14).
- 7.2 Building on preliminary analyses begun during the 2006-2008 triennium, and without prejudice to the on-going task of keeping the Ramsar site Criteria and Guidelines generally under review (defined separately elsewhere in this Annex), conduct a thorough review and make proposals concerning the consistency, completeness, logic, coherence and clarity of the targets, guidelines and other materials that support the implementation of the Criteria, including (but not limited to) targets in the Convention Strategic Plan, sources of contextual data for scientific evaluations, and guidance in the *Strategic Framework and guidelines for the future development of the List of Wetlands of International Importance* as amended.
(Resolution IX.2 tasks 110 and 112, STRP14).
- HIGH PRIORITY**
- 7.3 In support of the on-going task (defined separately elsewhere in this Annex) of securing the periodic updating of relevant population estimates and thresholds for the application of Criteria 6 and 9, and in conjunction with the task defined separately above concerning review of targets, guidelines and contextual data that support the implementation of the Criteria, conduct a specific review of the contextual information that can and should support the application of Criterion 9, and make recommendations in this regard.
(STRP14)
- 7.4 Following the work completed during the 2006-2008 triennium on biogeographic regionalization schemes of relevance to the application of the Ramsar Criteria:

- i) develop a web-based portal to downloadable GIS-based information on the relevant schemes for realms, provinces, and ecoregions, to be hosted within the Ramsar Sites Information Service;
- ii) investigate further the usefulness of existing terrestrial and inland biogeographical regionalisation schemes for supporting the application of the *Strategic Framework and guidelines for the future development of the List of Wetlands of International Importance*. (STRP14, [COP10 DR X on Biogeographic regionalisation in the application of the Strategic Framework: scientific and technical guidance]).

HIGH PRIORITY

- 7.5 Further develop advice on identifying and addressing under-representation in the Ramsar List, and investigate methods for defining targets for representation of wetland types in the List, including advice on data sources and methods for evaluating representativity of particular wetland types, and making links to relevant indicators of Convention effectiveness; with an overall emphasis on connectivity and other aspects of functional coherence of site networks, and including a review of experience at regional and other levels with such network concepts.

(Resolution IX.2 task 104, STRP14, [COP10 DR X on Biogeographic regionalisation in the application of the Strategic Framework: scientific and technical guidance]).

HIGH PRIORITY

- 7.6 Having regard to the tasks defined separately elsewhere in this Annex relating to urban wetlands and to dams and other water management infrastructure, review the ecological significance of reservoirs and other human-made wetlands, including their use by aquatic and other water-dependent biota, and prepare further guidance for Contracting Parties concerning the identification and designation of such wetlands for the Ramsar List, taking into account the experience gained by Parties that have already done so.

(Resolution IX.2 task 108, STRP14).

HIGH PRIORITY

8. Issues relating to wetland mitigation, restoration and compensation

- 8.1 Develop guidance on mitigation of and compensation for losses of wetland area and wetland values, in the context of [COP10 DR X on Detecting, reporting and responding to change in ecological character], and including lessons learned from available information on implementation of “no net loss” policies, the “urgent national interest” test, and other aspects relating to situations in which Article 2.5 and 4.2 and/or Resolution VII.24 are relevant.

(Resolution IX.2 tasks 128 and 166, STRP14, [COP10 DR X on Detecting, reporting and responding to change in ecological character]).

HIGH PRIORITY

- 8.2 Prepare proposals for updating and expanding existing Ramsar guidance on restoration and rehabilitation of lost or degraded wetlands, in the context of [COP10 DR X on Detecting, reporting and responding to change in ecological character], including approaches to prioritization and links with other Ramsar tools and guidance *inter alia* those on climate change and on economic values of ecosystem services.

(Resolution IX.2 task 127, STRP 14, [COP10 DR X on Detecting, reporting and responding to change in ecological character], [draft] Strategic Plan 2009-2014 strategy [1.7]).

HIGH PRIORITY

9. Issues relating to communication, education, participation and awareness (CEPA)

- 9.1** Make further contributions to proposals concerning optimal presentation of scientific and technical aspects of Ramsar guidance, in the light of findings from reviews of uptake and effectiveness of existing guidance, and in conjunction with actions flowing from Resolution IX.17 concerning consolidation and retrieval of COP decisions.
(Resolution IX.2 tasks 3 & 5, STRP14).
- 9.2** Seek opportunities to prepare materials for outreach purposes, particularly for decision-makers and other key stakeholders in relevant sectors, to support increased awareness and understanding on topics which are the subject of substantive guidance prepared by the STRP.
(Resolution IX.2 task 153).
- 9.3** Develop effective ways of providing training and capacity-building for relevant stakeholders in Contracting Parties to assist with the interpretation and implementation of scientific and technical guidance and other materials prepared by STRP, and with the assessment and definition of future needs.
(STRP Chair, at SC36).
- HIGH PRIORITY**

10. Emerging issues, and other sectoral concerns

- 10.1** Maintain a “watching brief”, including opportunistic collation of relevant information, on the following issues:
- i) soil and land degradation impacts on wetlands, including the potential scope for collaboration with the UN Convention to Combat Desertification;
 - ii) shifting patterns of human population distribution and the impacts of these on wetlands, including the potential scope for developing a better understanding of information needs, linked *inter alia* with relevant aspects of work on climate change;
 - iii) beyond the consideration of forest issues within the tasks defined elsewhere in the present Annex on climate change and energy, other aspects of the effects on wetlands of afforestation, deforestation and reforestation, awareness needs in the forests sector concerning forested wetlands and wetland-dependent forests, and knowledge needs concerning representation of relevant wetland types in the Ramsar List of wetlands of international importance (Resolution IX.2 task 165);
 - iv) governance issues of relevance to wetlands, including policy options concerning corporate social responsibility, and prevention of and responses to governance failures (including corruption), having regard *inter alia* to [COP10 DR X on The application of response options from the Millennium Ecosystem Assessment (MA) within the Ramsar Wise Use Toolkit];
 - v) wetlands and conflict, taking account of the background information exchanged within the STRP during the 2006-2008 triennium, and having regard as appropriate to Article 5 of the Convention;
 - vi) any need for guidance on specific scientific and technical implementation issues in transboundary contexts;
 - vii) wetlands and genetically modified organisms (GMOs), in collaboration where appropriate with the Convention on Biological Diversity.
- (STRP 14)

10.2 In addition to any proposals arising from the “watching brief” task defined above, consider what priority, if any, might need to be given to work or further work in relation to the following issue areas:

- i) social aspects of water management; and social impact assessment;
- ii) industrial sectors not mentioned in the list of other tasks defined in the present Annex;
- iii) biodiversity conservation, protected areas and wildlife population management;
- iv) hunting and harvesting in wetland ecosystems, whether for subsistence, commerce or recreational purposes.

(Resolution IX.2 task 167, STRP14).