

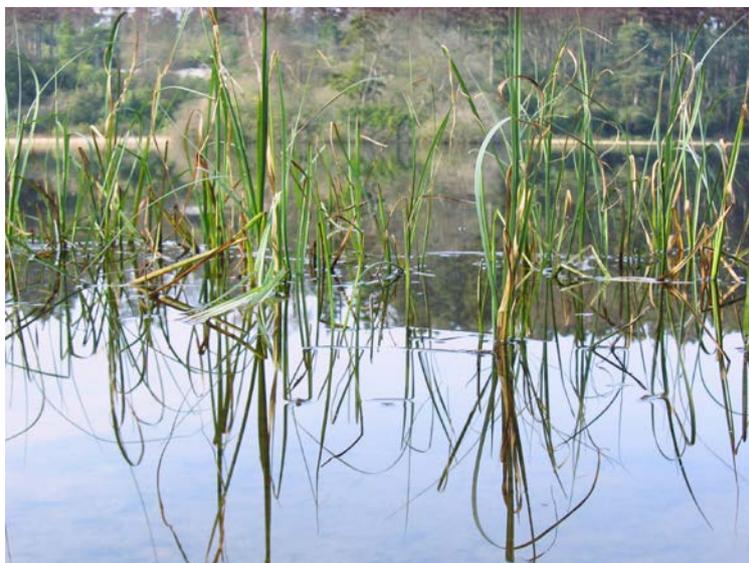


Change in ecological character of wetland sites - a review of Ramsar guidance and mechanisms

CONSULTANT REPORT

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Executive summary

The Ramsar Parties at COP11 gave several tasks to the STRP on change in ecological character of Ramsar Sites, some of which had been rolled forward from the previous triennium. A consultant review was commissioned in 2014 on one of these, covering Convention Articles 2.5, 3.2 and 4.2, the Montreux Record, the Ramsar Advisory Missions process and aspects of the Ramsar Sites Information Service, and including a synthesis of existing guidance and interpretations. The present report contains the full review; and a short (30-page) version has been produced separately.

Contracting Parties are at the beginning and end of Ramsar Site designation and management. Description by a Party of the ecological character of its Ramsar Sites is the baseline against which change is assessed for the purposes of Article 3.2. The expectations the COP has defined for this are now quite demanding and are not yet being followed by most Parties, which is hampering assessment of change.

Choosing the correct reference condition is challenging when there is incomplete knowledge about long-term natural variations and/or where the site shifts to a “novel ecosystem”. The Ramsar obligation to “maintain the ecological character” of sites can be an overly static concept if it is applied without factoring in these realities; yet at the same time robust (and clear) expressions of value are needed with which to defend designated sites against development threats and other unwanted change.

Reporting of change or likely change under Article 3.2 is generally inadequate. Possible improvements are discussed, including use of a risk-based approach rather than the exacting standards of proof seen in case-law thus far. The need to acknowledge that some change is not meaningful enough to count as change for the purposes of Article 3.2, while at the same time safeguarding the imperative to resist unjustified change, is also discussed.

Although instances of Article 2.5 (“urgent national interests”) being formally invoked for Ramsar Site deletion or boundary restriction are few, they have not been systematically recorded. There is no fixed understanding about the way in which a Party should make the formal notification, or what substantiation of its case may be required, and the Article is ambiguous about timing. These aspects are discussed, together with reflections on the legal interpretation of “urgent national interests” and principles for compensation under Article 4.2.

Parties are generally showing little enthusiasm for the Montreux Record, and in recent years it has been little used. There is however still scope for it to play a useful role in the right circumstances.

The Ramsar Advisory Missions process is a more successful tool, but it could have even greater impact, given secure resourcing, enhanced synergy with other MEA processes, better follow-up and better use of the accumulated case experience.

1. Summary of recommendations

This report flags a range of suggestions about the future operation of Ramsar Articles 3.2, 2.5 and 4.2, and associated systems in the Convention. Some of these are firm suggestions reflecting a history of consultation, while others are more tentative. The main recommendations are summarised below.

Article 3.2

- R.1 Information on natural variability, referring to sufficiently long historical timeframes where data are available, should be incorporated as far as possible in all relevant data fields of the Ramsar Information Sheet (RIS) and Ecological Character Description (i.e. not only as a single overview statement).
- R.2 Advice on conceptual models for wetland ecological character (as per STRP 2013-15 task 21) would still be worth developing, if it becomes possible in future to do so.
- R.3 Options for a dedicated section in the National Report Format and/or some more detailed guidance on climate impacts assessment for Ramsar sites should be explored. Advice on maintenance of the ecological character of wetlands under climate change in terms of strategies for protected area network management (as opposed to individual site-based reporting protocols) would also be useful.
- R.4 Parties should be advised that in incipient “urgent national interest cases” an Article 3.2 report is always expected as well as the Article 2.5 report. (The two might sometimes be one and the same; but often the Art. 2.5 report will be made later).
- R.5 Care should be taken not to set too high an evidential standard for “likelihood” of change for the purposes of Art. 3.2. There should be a presumption in favour of a precautionary approach, i.e. not demanding too high degree of certainty before the elementary step of basic reporting is taken.
- R.6 The Ramsar Wetland Risk Assessment Framework (Res. VII.10) should be updated, especially (in relation to early warning indicators) to embrace social and economic parameters which underpin the ecosystem services dimension of wetland ecological character; and to add advice on determining and applying degrees of confidence, confidence limits, standards of proof and precaution. The scope for possible consolidation of Ramsar advice overall on risk assessment (primarily in Resolutions VII.10 and XI.9) and monitoring (primarily in Resolutions VI.1 and VIII.8) should also be explored.
- R.7 Concerning the “materiality” of change, Article 3.2 should be read as though it included a “*de minimis*” qualification. Such a qualification must not be misused as a broader derogation, and a generally precautionary approach should be taken (i.e. “if in doubt, report”).
- R.8 Capacity-building efforts should be directed towards increasing awareness in “reporting chains” from site managers to Administrative Authority focal points about the simple core of the Article 3.2 reporting requirement, and on

recognising how existing processes using different routines and terminology in their own operational contexts are relevant to the Art. 3.2 process and should feed in to it, while keeping bureaucracy to a minimum.

- R.9 In the absence for a period of more than six years of any positive information about the maintenance of ecological character at a Ramsar site (i.e. officially via RIS updates and national reports), the site should be deemed at that point to be at risk of changing or having changed until the Contracting Party concerned indicates otherwise, thus counting as a “default” Art. 3.2 report.
- R.10 The Standing Committee’s regular meeting agenda item on Ramsar site status should be enhanced, *inter alia* by tasking the regional representative members of the Committee with marshalling relevant information from their regions in advance of the Committee meetings, supported by a list of sites provided by the Secretariat indicating earlier Art. 3.2 reports in need of updating.
- R.11 A full, up-to-date and transparent record of Article 3.2 reports should be maintained by the Secretariat and used as input to relevant Ramsar site status & trends assessment processes at regional and global level. Past case experiences should also be used to help advise Parties in cases of doubt about what to report.

Articles 2.5 and 4.2

- R.12 To clarify Article 2.5, and to be consistent with Article 8 and Resolution IX.6, Article 2.5 reports should be submitted at the point when the Contracting Party concerned wishes to confirm its intent to delete or restrict the boundaries of the site concerned, and should detail the specific grounds on which “urgent national interests” are being asserted.
- R.13 Past case experiences of implementation of Article 2.5 should be documented and made available, and should be used where appropriate to help in providing guidance to Parties.
- R.14 Options should be explored for developing guidance on how to verify a lack of alternatives when Art. 2.5 is invoked, including on guidance on the “area of search” for alternatives, the standard of proof and the onus of proof.
- R.15 Any planned sacrifice of the values of a Ramsar site which might be of similar significance to a loss which would lead to restriction of site boundary but where no site boundary restriction is being proposed, should be voluntarily tested against the standards of Article 2.5 (urgent national interest) as though such a restriction were being proposed.
- R.16 All cases where compensation has been either provided or attempted under Article 4.2 should be subject to follow-up monitoring at least every five years by the Contracting Party concerned and by the Ramsar Secretariat, to ascertain the outcomes achieved. The Secretariat should undertake periodic checks of information held on Art. 4.2 cases in the RSIS to ensure that its files are complete in this respect. Lessons learned should be documented and made available. Some simple guidance should be compiled on appropriate time intervals for follow-up and on categories of information which it would be helpful to record for this purpose.

The Montreux Record

- R.17 Assuming the Montreux Record is retained as an available tool, the harmonisation amendments to the Montreux Record questionnaire proposed in section 7 of this report should be subject to appropriate consultation at a suitable juncture (without taking attention away from other priorities), and if consensus is found, an opportunity should be sought to adopt a revised version of the questionnaire to replace the one currently annexed to Resolution VI.1.
- R.18 Wherever applicable and appropriate the Montreux Record (and the Article 3.2 process in general) should be operated in a linked and harmonised way with the World Heritage Convention's "List of World Heritage in Danger", while having regard to the necessary differences in scope and process between these two tools.

The Ramsar Advisory Missions process

- R.19 A pragmatic and proactive approach should be taken to triggering Ramsar Advisory Missions (RAMs) where it is clear that they will add value, for example extending if necessary to candidate Ramsar sites as well as designated ones. The wider strategic benefits of a Mission should always be considered alongside its site-specific purposes.
- R.20 Awareness of the option of using a RAM, and the process for triggering it, should be more actively promoted. The Secretariat should regularly review the list of Article 3.2 reports to consider where RAMs should be suggested.
- R.21 The linkage between RAMs and the Montreux Record should not be given any particular importance unless the Party concerned in a given case sees value in making this link.
- R.22 In cases of sites with relevant multiple designations or where other obvious mutual interests are at stake, RAMs should more often be undertaken on a joint basis with other MEAs and analogous processes. When a RAM or other MEA's equivalent is under consideration in any of the relevant fora, the "joint approach" option should be prompted automatically as a matter of routine.
- R.23 An adequate allocation of funds for RAMs (of the order of CHF 150,000 per annum) should be reinstated in the Ramsar core budget. Opportunities to raise additional funds should also be explored.
- R.24 Reference to the potential role of STRP members in RAMs should be added to the Panel's *modus operandi* when the latter is next revised.
- R.25 The Contracting Party concerned, when accepting a final RAM report, should make clear its intentions and the nature of the commitments it is making to implement the recommendations. A simple but systematic approach should be developed for following up recommendations made in RAM reports, evaluating the outcomes, and providing follow-up advice and support if required.
- R.26 More use should be made of the case experiences documented in RAM reports, for example by synthesising key messages and lessons learned

according to selected themes, and providing more language translations of the reports (or at least of their summaries).

- R.27 Based largely on enhancements of existing activities, the Ramsar Advisory Missions tool should be expanded into a broader systematic Ramsar (sites) Advisory Service, with a spectrum of response options to choose from (including “rapid response consultations” or similar), according to the circumstances.

Requests to STRP concerning further attention to this area of work raised the possibility of further rationalisation and streamlining of the overall regime for detecting, reporting and responding to change in wetland ecological character. Some specific measures which will contribute to this are mentioned in the report, but since the Standing Committee has decided that no Draft Resolution on this subject will be tabled at COP12, no changes to guidance are proposed here. Instead an informal consolidation of some key existing guidance and interpretations is provided in Annexes B-E, which may be useful in the meantime.

Work in the Secretariat has advanced during 2014 on a streamlined re-structuring of the Ramsar Sites Information Service (RSIS) and updating of relevant internal guidance, and suggestions have already been fed in from the present review (as discussed in section 5 of the present report) on issues such as search capabilities, categorisation of “story units”, the status of files and coverage of Article 2.5. The list above therefore includes no further recommendations on this aspect.

2. Summary of the purpose of the task and work undertaken

Background

- 2.1 Successive COPs have generated a large body of global guidance on implementation of the Articles of the Convention which deal with change in ecological character of Ramsar sites and other wetlands (Articles 2.5, 3.2, 4.2 and 8.2). The STRP has produced a variety of supporting information on this, and the Secretariat and Parties have accumulated much valuable experience from individual cases, including those where the Convention's supporting mechanisms (such as the Ramsar Advisory Missions) have been used.
- 2.2 Practical experience of applying the guidance continues to generate new insights into good practices, and to illuminate remaining gaps and needs for decision-support.
- 2.3 At the same time, scientific understanding of ecosystem change issues has also continued to develop, producing new questions for the Convention's approach in certain respects.
- 2.4 Several aspects of the further guidance seen by COP10 (2008) as being required on detecting, reporting and responding to change in ecological character were included in the STRP programme for 2009-2012, but little progress was made on those due to lack of resources. They were rolled forward into the 2013-2015 programme and combined with a refined view of the overall issue which developed during the 2009-2012 period, as well as a revised version of another task from COP10 concerning the Montreux Record.
- 2.5 At the STRP's 17th meeting in 2013, the Panel decided to consolidate several of the COP11 requests that relate to this area (from Resolutions XI.4, XI.8, XI.14 and XI.17) and to focus principally on streamlining and improving the procedures and guidance, through four interrelated tasks (describing, monitoring, reporting and responding to change in ecological character). The summary definition of these tasks is given in Annex A.
- 2.6 The Standing Committee at its 46th meeting in April 2013 identified one sub-element of this task-cluster (on reporting change) as a priority to progress. A funding allocation was approved by the STRP Oversight Committee in November 2013 and the consultant was appointed in March 2014.

Scope of the work

- 2.7 Some aspects of the "reporting change" sub-task are contingent on other parts of the STRP programme which have not been completed (particularly concerning shifting baselines). Taking that into account, the terms of reference for the present report defined the following main **objectives**:
 - Article 3.2 – review of gaps in guidance, and options for addressing issues such as thresholds of change for triggering reports, and shifting baselines.
 - The Ramsar Sites Information Service and the Article 3.2 process – recommendations for the future.

- Articles 2.5 and 4.2 (urgent national interest and compensation) – review of existing guidance, and identification of any needs/opportunities for update or consolidation.
- The Montreux Record – review of its role and operation, and recommendations for the future.
- The Ramsar Advisory Missions process - review of its role and operation, and recommendations for the future.
- Recommendations on the scope for further rationalization and streamlining of the overall regime for detecting, reporting and responding to change in wetland ecological character.

2.8 There is naturally a tradeoff to be made between trying to achieve “streamlining” on the one hand and trying to respond to requests for fuller conceptual thinking and new schemes of criteria etc on the other. This report seeks to make available sufficient background on each issue as well as giving a strategic perspective, so that both needs can be met at least to some extent.

Working methods

2.9 Initial proposals for a “writing workshop” of key specialists were excluded from the eventual terms of reference, and the work has been undertaken primarily as a desk study, involving consultations by telephone and correspondence (within the STRP and beyond) and review of source materials (see list in Annex F).

2.10 In addition, a series of meetings with Secretariat staff was held in Gland in May 2014.

Eventual outputs

2.11 The Standing Committee at its 47th meeting in April 2014 determined that draft Resolutions for COP12 would not include any new decisions in this subject area. The Secretariat has advised that the outputs from this work should be designed for internal use by the Secretariat on an “as required” basis rather than being distributed to Parties.

2.12 A short overview of “handling wetland ecological change issues in Ramsar” has also been included (see section 3), and this might potentially have wider application.



3. Handling wetland ecological change issues in Ramsar - summary statement

The Ramsar List of Wetlands of International Importance

- Each site has its international importance described, against the Ramsar criteria
- Each site has its ecological character described, according to a set list of attributes
- The List as a whole (and sub-lists, e.g. at regional or national level) also has attributes & values (number of sites, extent, diversity, representativeness, distribution, ecological coherence, etc.)

Supported by:

Criteria, ECD, conceptual models for wetland ecosystems, concepts & models of ecosystem value (including ecosystem services), analysis of underrepresented wetland types

Action priorities:

- Designate to fill gaps and make the list more complete
- Describe each site fully, and keep updating whenever things change

The Convention's primary aims for the List

- "To stem the progressive encroachment on and loss of wetlands"
- Conservation of listed sites, and wise use of all wetlands, both interpreted as "maintenance of ecological character" of the individual wetlands
- Normally this means trying to protect and enhance, and not degrade or lose, any of the values described for the sites in their RIS and ECD
- Encroachment and loss are still occurring and still need stemming

Supported by:

Site management planning, status & trends assessments, indicators

Potential problems:

- If the values for a site are incompletely described, or the description is based on a mis-reading of the evidence (ie is ecologically misguided), protection efforts may be mis-targeted
- If the values were correctly described but the description is no longer applicable because of underlying ecological change, the wrong reference framework will be being used for conservation efforts (and for performance assessment)

Warning when achievement of the primary aims may be at risk

- Article 3.2 - inform the Secretariat immediately if the ecological character has changed, is changing or is likely to change adversely due to human influence

Informed by:

Monitoring & surveillance systems, risk assessment, Limits for Defining Change in Ecological Character (LDCEC), early warning indicators, EIA, taking a precautionary approach

Is all about

alertness, sensitivity, skilled discrimination, communication and awareness

Supported by:

Article 2.5 - tests to meet to decide whether a superior interest can legitimately override the Ramsar primary aims
Res IX.6 - sites losing interest for unpreventable reasons other than Art 2.5
Res X.16 – framework of processes

Secretariat:

- Maintains overview of all such instances in database
- Ensures Parties as a whole are aware, have opportunities to share advice & assistance, and to safeguard their collective interest in the state of the global list, including holding each other to account by ensuring fair & equitable observance of the Convention's requirements (Standing Committee and COP processes)

Action priorities:

- Report all cases that merit it, including rapid/summary initial alerts, with minimal bureaucracy
- Organise a full & transparent & searchable central database of reported instances

Responding to issues that jeopardise achievement of the primary aims

- Includes mutual support between countries, provision of technical advice
- Includes Montreux Record, Advisory Missions, collaboration between MEAs, role of the Ramsar STRP
- Has some funding implications

Supported by:

Res XI.9 (AMC sequence), Res VIII.16 (restoration)
Art 4.2 and Res VII.24 - framing compensatory measures when tests have been met regarding superior interests, or when mitigation/restoration efforts will not be enough
Res X.16 – framework of processes

Action priorities:

- Put this whole system more centre-stage; refresh the imperative
- Provide a pragmatic spread of options (doing more with RAMs, broadening to a "Ramsar Advisory Service" including "rapid response" options, providing more *ad hoc* support channels)
- Make the overview more complete; do more lesson-learning

Today's evolving perspectives

- How ecosystems behave in the face of change is a set of “capability” values in its own right - the science of ecological resilience, adaptation, regime-shifts etc

Challenge:

- Understanding cycles of change on a much longer timescale; putting current ecological evaluation systems and “defensive” safeguarding policy frameworks in that context

Action priorities:

- Legal & policy checks & balances for distinguishing genuine natural long-term shifts or novel stabilities from spurious claims by vested interests that something has changed in this way when it hasn't (can't let greater enlightenment about inherent dynamism of wetland ecosystems be a basis for so much flexibility that we lose the core values and jeopardise the primary aims)
- Formulaic, criteria-based decision-making for Articles 3.2, 2.5 and 4.2 is not always possible or appropriate: need therefore to develop approaches based more on risk management, precaution, and a graduated spectrum of response options

Leadership from Ramsar

- Ramsar has some extensive thinking and well-evolved systems in this subject area, which are crucial for the Convention's own success and have much to offer to wider interests
- On-going accumulation of implementation experience and reflective analysis continues to generate ideas for refinement, and new challenges are emerging too: both aspects are reviewed in this report, and recommendations are summarised in section 8

4. Article 3.2

- 4.1 Article 3.2 of the Convention provides that “each Contracting Party shall arrange to be informed at the earliest possible time if the ecological character of any wetland in its territory and included in the List has changed, is changing or is likely to change as the result of technological developments, pollution or other human interference. Information on such changes shall be passed without delay to the [Ramsar Secretariat]”.
- 4.2 This requirement is strict and unqualified. A key part of its force is that it envisages a “real time” or “as it happens” communication system, so that responses to specific issues can be prompt and effective. The phrase “without delay” is critical to this, and yet it is extremely poorly observed by most Parties, or in many cases even ignored. It has long been recognised that this situation must change, if the credibility and utility of the Convention as a whole is not to be undermined.
- 4.3 The strict requirement relates to the passing of information. Art. 3.2 implies nothing about action which may or may not follow from the passing of such information. The process allows for a common appreciation of the issues at stake in a given case, and for a common appreciation about assurances and solutions which would represent satisfactory outcomes in terms of the global List, with or without additional action. It is an obligation, but is a constructive and non-threatening one in this sense.
- 4.4 The Article 3.2 sentence includes several concepts and component parts, each of which has raised important interpretation issues which have been tested or analysed over the years. Much discussion on this has been documented and guidance on various aspects adopted by the COP, all of which is summarised in a consolidated form in Annex B below, under the following headings:
- “Arranging to be informed”
 - Ecological character
 - Change in ecological character
 - Actual change and likely change
 - Human-induced change and “natural” change
 - Positive change and negative change
 - Change that is meaningful enough to count as change for the purposes of Article 3.2
 - Novel ecosystems
 - Limits of Acceptable Change/Limits for Defining Change in Ecological Character
 - The role of management plans
 - Reporting change (“passing information without delay”)
- 4.5 The present section aims only to discuss selected aspects of these where there are particular current problems, where issues have been raised by consultees, or where there might be opportunities for streamlining, clarification or further useful work in the short term.

Describing ecological character

- 4.6 The description of ecological character¹ for each Ramsar site (not the description of its international importance, which is a different matter - see discussion further below) is the baseline against which change is assessed for the purposes of Article 3.2. The aspect of this on which most uncertainty remains is how to identify the correct reference condition to use².
- 4.7 A single assessment at the moment of designation, or at some later moment when an ecological character description (ECD) sheet³ is completed, may not necessarily characterise the site in the most accurate or the most meaningful way for the purpose if, for example, underlying conditions fluctuate from time to time or they are evolving in a particular direction. The moment of designation or ECD sheet completion is normally determined by factors that are unconnected with the site's ecological timeline, and might therefore be quite unrepresentative of its true nature.
- 4.8 Some aspects of correcting for variability over time are considered in the Convention's guidance on assessing international importance, for example in calculating average numbers of animals regularly using a site. For the purposes of describing ecological character, however, the ECD sheet mostly asks questions that provide a static "snapshot" of the conditions and characteristics of the site, and offers no way of knowing if the picture thus presented is the most valid baseline against which to evaluate future change.
- 4.9 One partial exception is description field 3.9, which asks about "trends", but only in the sense of an assumed negative pressure on the site's values. The sheet does not ask about any multi-annual cycles in the site's environmental context (e.g. rainfall, temperature), or about trends that may not necessarily be negative (e.g. in geomorphology, evolution, succession or diversification).
- 4.10 The Parties at COP11 took the opportunity to amplify the issue when integrating cross-references to ecological character descriptions in the revised version of the Ramsar Information Sheet (RIS) which is also compiled for each site⁴. RIS field 13 asks for a narrative description of "natural variability in the ecological character of the site (either seasonally, or longer-term if known), and any known past and current trends in ecological character in part, or all, of the site". The accompanying guidance gives the example of seral vegetation succession.
- 4.11 Apart from this, what may be needed is a more conscious reading of all of the different ingredients of a site's ecological character as potentially including some degree of natural variability. In the definition of ecological character, the "combination of ecosystem components, processes and benefits/services" can include processes of long-term cyclical change, homeostatic responses to perturbation (i.e. resilience, which is both a process and a service), and the

¹ The current Ramsar definition of wetland ecological character is given in Resolution IX.1 Annex A; and guidance on describing ecological character for individual sites is given in the Annexes to Resolutions X.15 and XI.8.

² Thinking and experience on wetland ecological character continues to evolve in relation to other aspects of the concept too, and the description framework could conceivably be developed further in future to address issues such as the genetic and trophic structure of the ecosystem. These issues are however not considered further in the present report.

³ Template provided in the Annex to Res. X.15.

⁴ RIS 2012 version, annexed to Res. XI.8.

"service" of adapting to change by switching from one stable state to a different stable state.

- 4.12 Rather than relying therefore only on a specific ECD field or two devoted to overall issues of cycles and trends, this dimension should be considered in addressing any of the other fields in the ECD sheet where it may be relevant.
- 4.13 Descriptions of ecological character for individual sites should always aim to consider an appropriate temporal context in order to embrace these aspects. Prior to the COP10 (ECD) and COP11 (RIS) guidance quoted above, COP9 had already advised that "essential to wetland management is [sic] baseline data that establishes [sic] the range of natural variation in components, processes and services at each site within a given time frame, against which change can be assessed"⁵. No guidance on establishing a relevant time frame was given, however, and further work on this could be useful.
- 4.14 When a site is judged to be of international importance, the evidence confirming that fact, and further descriptive information (for ECD) compiled at the same time or in association with the same evidence-base, is naturally assumed to be depicting a desirable state. It is understandable that this may then come to be assumed also as a depiction of the *most* desirable state or a *target* state, and hence the benchmark for deciding when there has been undesirable change. This second assumption however may often be flawed.
- 4.15 Both the Convention's objectives for "conservation" (of listed sites) and "wise use" (of all wetlands) are nowadays defined in terms of the "maintenance of ecological character"⁶. This presents a somewhat static paradigm for the values at stake, which does not easily accommodate the idea of progressively or periodically changing natural baseline conditions.
- 4.16 In the absence of any information to the contrary, it is understandable to polish a description of conditions found at the time of a site's designation (or at the time of later full survey of its ecological character) and use this as the most robust available basis for defending the site against obviously unwanted change (e.g. from development threats). With further work, however, a different true baseline might come to be understood in any given case. The "bandwidth" of natural fluctuations at the site concerned, and the nature of what it means to maintain its ecological character, may need to be reappraised; while not lessening any imperative to prevent absolute deterioration or loss of value.
- 4.17 Examination of paleo-ecological records has suggested that contemporary assessments may be significantly underestimating the magnitude of long-term historical changes in wetlands⁷. It may even be that the ecological character of a Ramsar site at the time of listing represents a state that is no longer sustainably resilient to loss. Rather than being a benchmark to be maintained, the ecological character in these circumstances would represent a state that ought to be changed by management, i.e. to avoid otherwise

⁵ Res. IX.1 Annex A.

⁶ The history of the evolution of these concepts in the Convention, and the convergence of the adopted definitions that relate to them, is discussed in Pritchard (in press) and Finlayson *et al.* (2011). Ramsar also has objectives and values relating to networks of sites: Article 3.2 relates only to individual sites, and so this aspect is not relevant here; but it is mentioned in relation to Article 4.2 in section 6 below.

⁷ See for example Gell *et al.* (2013).

inevitable ultimate loss and to restore the site's true value as seen from a longer-term perspective.

- 4.18 The Ramsar Parties already recognised in 1996 (Annex to Resolution VI.1) that "in some instances a Contracting Party may decide to restore a wetland to re-establish the ecological character that existed prior to the date of designation". In such cases they are advised to provide "information concerning the target state that any restoration is aiming at", and are permitted to compile a new Ramsar Information Sheet for the site "to establish a new baseline for assessing any future change".
- 4.19 The Ramsar definition of wetland ecological character refers to the *combination* of the ecosystem components, processes and benefits/services that characterise it [emphasis added]. Hence in addition to the listed ingredients that go to make up the description of a site, the concept also embodies a holistic idea of what they represent in total, and how this might characterise a site in such a way as to distinguish it ecologically from other sites. This is relevant also to notions of site "integrity" as an attribute to protect. (Site integrity has not been specifically defined in Ramsar contexts, but it features in some other protected area regimes).
- 4.20 The Ramsar Ecological Character Description sheet (Resolution X.15) accordingly requests a "summary statement" about the site, described as "two or three narrative sentences giving a statement of what is ecologically distinctive (not necessarily important) about the site". It then notes that "supplementing the summary statement with simple conceptual models of the key characteristics of the wetland is encouraged".
- 4.21 The accompanying guidance explains that "simple two- or three-dimensional conceptual models accompanied by summary descriptions of key features, processes and functioning can be a powerful tool supporting the ecological character description". The STRP has had a task in successive work programmes to prepare advice on the development and use of conceptual models for this purpose, but to date it has not been possible to complete this work⁸. In the meantime the ECD guidance points to one useful source reference on the subject, Davis and Brock (2008), who describe a conceptual model in this context as "effectively a hypothesis, presented as a diagram, of how a system operates".

The concept of change in ecological character

- 4.22 The importance of addressing change and likely change in ecological character is linked to the fact that under the Convention there is an objective of maintaining this character⁹. The Convention's definition of change is most recently given in Resolution IX.1 Annex A: "For the purposes of implementation of Article 3.2, change in ecological character is the human-induced adverse alteration of any ecosystem component, process, and/or ecosystem benefit/service".
- 4.23 For the purposes of reporting under Article 3.2 it is not necessary to know the precise cause of the change, or who is responsible for it, or even whether its origin arises within the territory of the Contracting Party to whom the site

⁸ STRP work programme 2009-2012 task 4.4 (ii); and STRP work programme 2013-15 task 21.

⁹ Some logical curiosities in the portrayal of this objective are discussed in Annex B of the present report.

belongs. (These issues may have relevance later, in considering response options). It is necessary however for the change or likely change to be of an adverse kind, and to be anthropogenic rather than entirely “natural” (this distinction is discussed further below).

- 4.24 Although ecological character has a holistic dimension as discussed above, discerning change does not necessarily depend on deciding that there has been or is likely to be a loss of the site’s overall integrity. It should normally be assumed that this is part of the story; but the “trigger” for reporting under Article 3.2 need only concern any one of the ecosystem components, processes or services identified in the site’s ecological character description.
- 4.25 This does mean *inter alia*, however, that a change or likely change in the ecosystem *services* delivered by the site is sufficient reason for an Article 3.2 report, even if there has been/will be no discernible change in the ecosystem components and processes of the site. This point has probably not yet been very widely appreciated.
- 4.26 Change in ecological character of a Ramsar site is not the same thing as change in its international importance (i.e. its reasons for qualifying for designation against the Ramsar criteria). Ecological character is dictated by the ecology; while international importance is dictated by a human value-construct. Every wetland has ecological character, but only some wetlands have international importance¹⁰.
- 4.27 Maintenance of ecological character is the management objective, not maintenance of international importance. The [values represented by the description of ecological character](#) will often far exceed the minimum thresholds established in the criteria for international importance, and the obligation is to maintain [the described level of these values](#), not merely to preserve the minimum. In fact, in relation to sites designated under Criterion 6 because they support 1% or more of a biogeographic waterbird population, allowing a site’s bird numbers to reduce to the minimum would result in a population decline which could then lead to a reduced 1% threshold number for that population, so that a further decline would still allow 1% of such a reduced population to be supported, and the logical iterative end would be its extinction.
- 4.28 A site can therefore experience change in its ecological character without necessarily experiencing a change in its international importance. Moreover, as shown in Resolution IX.6¹¹, a site can experience change in international importance without necessarily experiencing change in ecological character. Hence the two things have different meanings; and Art. 3.2 is concerned only with ecological character¹².
- 4.29 Assuming anthropic origins and adverse impacts of at least some changes in climate affecting wetlands, the STRP, by correspondence during 2008 and 2009, discussed whether in principle Article 3.2 should apply to the effects of

¹⁰ These points were also discussed in COP10 document Doc. 27 (2008). Although ecological character and international importance are different things (as explained in the text above), they are both relevant to communicating the value of a site.

¹¹ Paragraphs 6(vi) and 6(vii) of the Annex to the Resolution; see also paragraphs 59-61 of COP9 document Doc. 15 (2005).

¹² That said, if there are any implications of a change in ecological character for the site’s ability to continue to meet the criteria under which it was originally designated, this should of course be mentioned in the Art. 3.2 report.

climate change on Ramsar sites. It seems likely that the drafters of Art. 3.2 were not considering indirect impacts at a globally-diffused scale, although the Convention generally has become concerned with a broader range of issues over the years, and the COP's current (2005) definition of change in ecological character does not distinguish between direct and indirect human-induced change.

- 4.30 That said, there was a concern that Art. 3.2 might lose much of its usefulness if it were interpreted to require reports on actual and threatened effects of climate change, which might potentially implicate most of the sites on the List. It had already proved difficult to encourage Parties to use it adequately in all of the clearest cases of direct major habitat loss, so the realistic prospects of regularly broader application seemed slim. Although technically the Art. 3.2 regime should be applied to climate change impacts, there was a view that it might be more useful to address them via other more specifically-tailored processes, such as a dedicated section in the National Report Format and/or some free-standing guidance on climate impacts assessment.
- 4.31 The Panel duly concluded at its mid-term workshop meetings in February 2010 that change in wetland ecological character as a result of climate change should be regarded as lying beyond the scope of Article 3.2 (regardless of whether or not such change is anthropogenic), and that the use of Article 3.2 in this context should be discouraged. The context for consideration of climate change would instead be Resolution X.24 on "Climate change and wetlands" and Res. XI.14 on "Climate change and wetlands: implications for the Ramsar Convention on Wetlands".
- 4.32 A concordant view had already been taken by at least one Contracting Party, namely Australia, which in its 2009 "National Guidelines for Notifying Change in Ecological Character of Australian Ramsar Sites"¹³ stated that "It is widely recognised that the current rate of climate change is human-induced ... [but] ... until such a time as the Convention provides guidance on an approach to this issue, it will not be an accepted basis on which to make a [Art. 3.2] notification".
- 4.33 This Australian stance (and by implication the conclusion reached by the STRP) has however been challenged by Pittock *et al.* (2010), who note that the COP guidance adopted in 2010 (Res. X.16) makes no such exception, and that consequently climate-related change should be reported under Article 3.2 and Parties not doing so would be in breach of the Convention. They note also, for example, that water abstractions that previously were considered acceptable could become unacceptable with the added compounding factor of climate change effects, so it would be distorting to exclude them from the reporting process.
- 4.34 Finlayson (2013) has argued that unless the Convention develops guidance on this it may find itself being unable to provide formal advice on the maintenance of the ecological character of wetlands under climate change (although his concerns relate more to strategies for protected area network management than to site-based reporting protocols *per se*).
- 4.35 On balance, the STRP's 2009 view specifically about those reporting protocols probably continues to hold good, although (as mentioned above)

¹³ DEWHA (2009).

the potential role of the National Report Format and guidance on climate impacts assessment formed part of the background reasoning for the Panel's view, and some renewed attention to those aspects could perhaps be valuable. Otherwise climate change issues relate more to the question of establishing reference conditions against which ecological character change might be detected, and this is discussed under a separate heading below.

- 4.36 The Ramsar Convention makes two different provisions for reporting changes affecting Ramsar sites. Article 3.2 asks Parties to inform the Secretariat about changes in ecological character, but when a restriction of designation boundaries is in prospect, the Party concerned is asked to inform the Secretariat under the separate requirement in Article 2.5, which is framed differently (see section 6 below).
- 4.37 If a Party is proposing to develop part of a site (for example to convert it from a wetland into something else) and to delete that part from the designated area, it could see its reporting obligation as lying solely under Art. 2.5 (once urgent national interest is proved). Hence "loss of wetland area" in these circumstances might be seen as something other than a "change in ecological character" of the wetland. This would be a perverse outcome.
- 4.38 Prior to COP10 there was an ambiguity as to whether a site's ecological character could remain unchanged even if its area was reduced (i.e. in the terms of the Res. IX.1 Annex A definition, all of the components, processes, and services of the ecosystem might continue to be maintained, but on a smaller area). Res X.15 has now cured this by making clear that the site's shape and dimensions are themselves among the "components" of its ecological character.
- 4.39 Loss of habitat from a Ramsar site other than in the case of an associated boundary restriction or deletion of the site therefore clearly has to be reported under Art. 3.2. It might be helpful now to advise Parties that the same should apply in incipient "urgent national interest cases" too, i.e. an Article 3.2 report should always be expected as well as an Article 2.5 report. (The two might sometimes be one and the same; but it is perhaps more likely that reporting under Art. 2.5 would take place later, i.e. it would not happen early enough to satisfy the rapidity expected by Art. 3.2. This difference is discussed further in section 5).

"Likely" change

- 4.40 Part of the power of Article 3.2 is its precautionary nature, in covering not only those site changes that have happened or are happening, but also those deemed "likely" to happen. No guidance has been given however on what degree of "likelihood" or confidence is sufficient to require the triggering of an Article 3.2 report.
- 4.41 Clearly it would defeat the aim of this provision if strict standards of evidence and substantiation were imposed. On the other hand, the system might be open to abuse (or at least ineffectiveness) if the merest suggestion or anxiety on the part of one person were enough to create the legal reporting obligation. The appropriate approach will lie somewhere in a middle ground of informed, authoritative or expert judgement, supported by a "risk management" approach.

- 4.42 Related provisions have occasionally been tested or clarified in other fora, serving only perhaps to illustrate how challenging it is, in an ecological context, to codify interpretations of the degree of “trigger sensitivity” that may be appropriate for this.
- 4.43 For example, a Court judgement in the UK in 1991¹⁴ caused some alarm, by interpreting a provision in statute for certain special nature conservation measures to be triggered by operations deemed “likely to destroy or damage” a protected area’s values, as requiring that evidence should be shown of the *probability* of such damage, rather than simply its *possibility*. This judgement was criticised by some legal commentators as “based on an entirely incorrect understanding of the context of the legislation”¹⁵. The UK government in response initially indicated that it was considering whether to adjust the Court’s interpretation via enactment of new Habitats Regulations in 1994, but ultimately it did not do so, and it would appear that the judgement still stands.
- 4.44 In the Gabcíkovo-Nagymaros case in the International Court of Justice concerning the Danube River (see Annex C below), the Court considered that although there may have been a serious threat to an essential interest, the existence of a “peril” as defined in international law had not been objectively established¹⁶. As summarised in the IUCN Environmental Law Centre’s analysis of the case¹⁷, the Court’s view was that “the mere apprehension of a possible peril could not suffice, since the peril [...] has to be [...] imminent. Imminence is synonymous with ‘immediacy’ or ‘proximity’ and goes far beyond the concept of ‘possibility’. That does not exclude that a peril appearing in the long term might be held to be imminent as soon as it is established [...] that the realisation of that peril, however far off it might be, is not thereby any less certain and inevitable”.
- 4.45 Specifically in relation to Ramsar Article 3.2, the Australian Government’s national guidance¹⁸ states that “‘likely to change’ is when there is evidence that a change in character will occur in the future or is imminent”. The guidance puts emphasis on basing reports on “scientifically robust evidence of change”, stressing that “an assessment of change to support an Art. 3.2 notification must be based on best available science”, and that “a site is ‘likely to change’ when the *scientific evidence* indicates that there is a reasonable likelihood, under current conditions or certain planned activities, that the site will undergo change in ecological character in the foreseeable future” [emphasis added].
- 4.46 All of these examples set a standard of proof that is relatively exacting for the purposes of Art. 3.2. This might be appropriate if what had to be submitted under the Article was an in-depth dossier on the “likely change” at issue; but it seems probable that the Convention, while not ruling out such things, was mostly aiming instead to stimulate much more rapid and “provisional” initial alerts about problems that may or may not then need deeper investigation.

¹⁴ Judgement by Lord Cullen in the Extra Division of the Scottish Court of Session 1st Division, 18 October 1991, in the case of North Uist Fisheries Ltd v Secretary of State for Scotland. *Journal of Environmental Law* (1992) 4(2): 241-250.

¹⁵ Quote from Ball, S and Bell, S (1994). *Environmental Law*. Blackstone Press, Second edition.

¹⁶ Gabcíkovo-Nagymaros Project (Slovakia v Hungary), 1997 ICJ REP. 92.

¹⁷ di Leva and Tymowski (2000).

¹⁸ DEWHA (2009).

- 4.47 It would probably not be wise for Ramsar to attempt to devise its own legalistic interpretation of a concept of “likelihood” of change, and it may be more appropriate to retain flexibility in this. It could however be desirable to express, in guidance, a presumption in favour of a precautionary approach, i.e. not demanding too high degree of certainty before the elementary step of basic reporting is taken. Setting the bar too high for judgements about “likelihood” may not help Article 3.2 to work to best effect.
- 4.48 Allied to this is the point that a small initial risk may be warning about a much bigger impending harm to the site. Non-linear or “threshold” responses to pressure are common in ecosystems, and Article 3.2 will act most effectively as a conservation tool when it is “tuned” to react sensitively to the earliest indications of the potential for harm.
- 4.49 The Ramsar Wetland Risk Assessment Framework adopted by Resolution VII.10 (1999) gives detailed advice on “early warning indicators”, which is relevant to this. Such indicators are defined in terms of measurable signals which may precede the occurrence of potentially significant effects, and which therefore provide an opportunity to determine whether intervention or further investigation is warranted.
- 4.50 The guidance in the Framework pre-dates the revised definition of “change in ecological character” in 2005, and it would benefit from some updating, and perhaps simplifying. Its definition of early warning indicators refers only to biological, physical and chemical parameters, and bases a discussion of “ecological relevance” on this. Given that ecological character is now defined to include a wetland site’s ecosystem services, and an Art. 3.2 report needs to be submitted if any of those services are likely to change, early warning should include social and economic parameters too.
- 4.51 Socioeconomic parameters may in any event also provide early warning of change in ecosystem components and processes, where for example an area’s human population increases, decreases or becomes displaced, where a fall in local incomes predictably leads to a switch in resource-use, where fishing effort progressively increases, or where there are any other relatively predictable relationships between such trends and their ecological consequences.
- 4.52 This should extend also to plan-making and decision-making processes which may reveal a prospect or proposal for change: monitoring of proposals as well as of decisions will therefore significantly enhance the kind of “early warning” capability that will make Article 3.2 work effectively, even if “likelihood” of change (as a prompt for actual reports) is judged to arise only at the stage of consents or commitments to proceed (e.g. with a development) rather than at the proposal stage.
- 4.53 The opportunity of an update to the Risk Assessment Framework could also be taken to incorporate some advice on determining and applying degrees of confidence and confidence limits, standards of proof and precaution; building on the discussion above.
- 4.54 Given in particular the often non-linear behaviour of ecosystems, there would be a case for better integration of Ramsar’s thinking on monitoring (primarily in Resolutions VI.1 and VIII.8) with its thinking on risk assessment (primarily in Resolutions VII.10 and XI.9).

Change that is meaningful enough to count as change for the purposes of Article 3.2

- 4.55 Article 3.2 is unqualified as to the magnitude or significance of the changes in ecological character of wetlands to which it refers. It implies that any change, no matter how trivial, should be reported. Clearly to do so would be neither practical nor helpful, but the Convention has never spelled out a way of deciding how big a change is a “real change” for this purpose, nor how to take account of naturally fluctuating baseline states.
- 4.56 A first step in any future advice on this would be to distinguish more clearly the two main parts of the problem, namely (a) absolute magnitude/triviality and (b) significant departures from the baseline norm. A summary of existing thinking in the Convention that has a bearing on each of these is given in Annex B below, and some further comments are made here.

Absolute magnitude/triviality

- 4.57 The “absolute magnitude/triviality” aspect suggests that despite the unqualified terms of Article 3.2, some instances of change ought on any reasonable view to be regarded as too trivial to require reporting, meaning in effect that they are not regarded as change at all, within the terms of the Article. The question then is how to define generally, or to decide in an individual case, what is the cut-off threshold between trivial changes which can be ignored and other changes which may be indicating something real that requires a response.
- 4.58 “Materiality” and “*de minimis*” concepts for this are discussed in Annex B; and the most appropriate solution is probably to proceed as though Article 3.2 contained a qualification based on these, while recognising at the same time that such a qualification must not be misused as a broader derogation, and that a generally precautionary approach should be taken (i.e. “if in doubt, report”). It could be useful for such an understanding to be explained in language which Parties could have a full opportunity to consult upon and refine as necessary, and for an agreed guidance text then to be adopted by the COP.

Significant departures from the baseline norm

- 4.59 The second problem, i.e. detecting “significant departures from the baseline norm”, relates partly to correctly defining the baseline in the right temporal context (discussed under “describing ecological character” above); and partly to discerning change against baselines that fluctuate or shift (discussed here).
- 4.60 STRP tasks in the current triennium have been defined to address “the determination of appropriate reference conditions for assessing change in ecological character”, “approaches to establishing the range of natural variability of wetland sites” and “advice on strategies for dealing with the emergence of novel or hybrid ecosystems, and shifting baselines as a consequence of climate change, for reporting changes in ecological character”. These tasks lie outside the terms of reference for the present

report, but some initial points on the issues are made below, so as to provide a connecting context for any eventual further work on the subject¹⁹.

Baselines that fluctuate: distinguishing “signal” from “noise”

- 4.61 The aim of monitoring in support of Article 3.2 is to look for any actual or potential perturbations which may become superimposed on the site’s normal pattern and which may indicate an issue of concern. That normal pattern may itself be a fluctuating one, and hence changes in the baseline influence what comparison to make in deciding whether there has been a departure from that baseline.
- 4.62 “Natural” changes in the baseline are not themselves the subject of the reporting requirement under Art. 3.2, since the requirement covers only human-induced change²⁰.
- 4.63 If human-induced adverse change was affecting the site at the time of designation (or at the time of RIS updates/Ecological Character Descriptions completed at any subsequent dates), this will be incorporated into the “baseline” description of the site. If such change is continuing to cause or to threaten changes in any aspect of the ecological character of the site thereafter, it should also be reported under Article 3.2, even if strictly speaking it is not a “change to the change” recorded in the baseline description.
- 4.64 The Australian national guidance on “limits of acceptable change”²¹ for Ramsar sites defines a change exceeding such limits as one where an ecosystem component, process or benefit/service “has changed beyond its natural variability”, to an extent that this is “quantifiable”²².
- 4.65 As discussed earlier, initial ecological character descriptions for Ramsar sites should include information on the known natural range of variability in respect

¹⁹ The outcomes of two recent events should also contribute to this: (i) a workshop on “Ramsar wetlands: detecting change in ecological character”, held under the auspices of the PAGES (Past Global Changes) network of the International Geosphere-Biosphere Programme (IGBP) established by the International Council of Scientific Unions (ICSU) (Queenscliff, Australia, November 2013); and (ii) a special session on “How does the Ramsar Convention respond to changing wetland baselines, thresholds and perception shifts in the Anthropocene?” held during the inaugural SFS/ASLO/PSA/SWS Joint Aquatic Sciences Meeting (Oregon, USA, May 2014). At the time of writing (August 2014), reports of these workshops have yet to be produced.

²⁰ As Resolution IX.1 Annex A has noted (elaborating on the reasoning in several earlier COP decisions), the inclusion of specific reference to Article 3.2 in the definition of change in ecological character is designed to clarify the maintenance obligation for the ecological character of Ramsar sites, noting that “such change concerns only adverse change caused by the actions of people”, and that it “therefore excludes the processes of natural evolutionary change occurring in wetlands”. No guidance has been provided to Parties on how to distinguish human-caused changes from naturally-occurring changes. This can be difficult, since, for example, an apparently natural change to a site may in practice be the consequence of a human-caused *ex situ* change, such as changes in the water management elsewhere in a river basin, or climate-related changes resulting from human-caused increases in greenhouse gas emissions.

²¹ In order to avoid confusion with other systems which use the term “Limits of Acceptable Change” (LAC) in environmental conservation contexts to mean something quite different, an analysis of these issues for COP11 (document Inf. 24, 2012) has proposed that usage in the Ramsar Art. 3.2 context should refer instead to “Limits for Defining Change in Ecological Character” (LDCEC).

²² DEWHA (2009). The guidance, for reasons of pragmatism, restricts the scope of relevant assessments to what it refers to as “critical” components, processes and benefits/services, defined as (for example - i.e. not only this, but other examples are not given) those in relation to which an “adverse change would cause significant negative consequences to the character of the site”. (This seems somewhat circular, i.e. saying that important change factors are those producing important changes, which therefore does not in itself define importance). A key question to review in light of experience will be whether this choice to set LAC/significance thresholds at the level of “critical” components etc. makes it sensitive enough for the proper operation of Art. 3.2.

of the components, processes and services of the site²³. This should not necessarily be taken as specifying the general *coarseness or fineness of resolution* with which change for Art. 3.2 purposes should be discerned, but only the *reference picture against which comparisons will be made*.

- 4.66 In other words a small change that *does not fit the pattern* will merit reporting, even if its absolute magnitude is less than the normal amplitude of variation. Not “fitting the pattern” may also relate to changes in the frequency or other timing characteristics of the baseline variability, rather than to any change in the quantities or sizes of the physical variables involved.

Baselines that shift: novel ecosystems

- 4.67 The fundamental nature of ecosystems is generally dynamic, and this poses challenges for well-intentioned “protected area” regimes like Ramsar’s, which are bound by necessity to “defend” important sites against unwanted change.
- 4.68 In some cases, the inherently dynamic ecological character of a wetland, or the wider systems it sits within (including climate, hydrology, species populations etc), may include a natural propensity to shift to different states, which are then as self-sustaining in the long term as the previous one. Such shifts may of course be induced or influenced by anthropogenic pressures.
- 4.69 Many systems worldwide are exhibiting such transformations into states which do not resemble historical configurations, thus posing even greater challenges for protection regimes that depend on history to define their reference conditions for tolerance of change. These situations are described as “novel ecosystems”²⁴.
- 4.70 There is probably a need to embrace such phenomena in a more enlightened way in protected area regimes. At the same time, some of the novel ecosystem trend is a trend of overall reducing diversity, reflecting “convergence through homogenization of biotas and parallel activities of humans aimed at shaping ecosystems to their own purposes”, “replacement of many local species with a relatively small number of widespread weedy species” and related tendencies²⁵.

Implications for the objective to “maintain”

- 4.71 Whatever thinking may be developed on shifting baselines and novel ecosystems for the purposes of reporting under Article 3.2, also needs to be tested for its workability in relation to Article 3.1. Art. 3.1 expresses the obligation of Parties to “promote the conservation” of Ramsar sites and as far as possible the “wise use” of all wetlands. Both of these purposes have come to equate to “maintaining the ecological character” of the wetlands²⁶.

²³ Res. X.15 also suggests that any limits of acceptable change, where defined, might also be included. (This predated the terminological discussion referred to in footnote 21 above, so the reference would now be to LDCEC rather than LAC).

²⁴ See Hobbs *et al.* (2009) and Hobbs *et al.* (2013); the latter including expanded definitions of the concept.

²⁵ Quoted from Hobbs *et al.* (2006).

²⁶ The most recent (2005) revised definition of “wise use” (Res. IX.1 Annex A) equates it to “the maintenance of [the wetlands’] ecological character”. By virtue of Art. 3.2’s requiring notification of change or likely change in ecological character of listed sites, and this then framing the Convention’s primary provisions for actions in response (e.g. those in Art. 8.2 (e), COP Recommendation 4.8 and Resolutions 5.4, VI.1, VIII.8 and X.16), “conservation” (of listed sites) is interpreted also as the maintenance of their ecological character.

- 4.72 In circumstances where a novel ecosystem has emerged or there is some equivalent shift in the baseline state of a Ramsar site, maintaining the site's ecological character as described at the time of designation (even if that description was fully accurate, in light of all the information available at the time), might no longer be a wise or workable objective to follow for the particular site. If so, maintenance of (or prevention of change in) its ecological character will not be the most appropriate measure of success for its management.
- 4.73 This suggests a shift in philosophy towards objectives for ecological resilience that are defined more in terms of coping with and adapting to certain kinds of change, rather than aiming for tighter control of change in systems assumed to be stable²⁷. It does not suggest that "maintenance of ecological character" is the wrong aim, but rather that this aim might need to include maintenance of a site's ability (where appropriate) to evolve, cycle, adapt and find new stabilities, *provided* that some statement of what is desirable or tolerable in this regard is made at the outset. Careful definition of site-specific objectives, ideally in management plans (and in a proper temporal context, as described earlier above) therefore becomes even more important.
- 4.74 On a site-specific basis also this will involve consideration of how to decide when retention or restoration of historical conditions is no longer possible, or at least is no longer feasible by "anything short of heroic action and intensive manipulation and management"²⁸. Response options (other than continuing to try to prevent change) at such points might include partitioning safeguard/restoration efforts according to which aspects of the site are amenable to this and which are not; managing for a different new stable character; and managing for a broader envelope of continuing future fluctuations/directional changes.
- 4.75 Despite a potential general homogenisation trend as mentioned above, not all novel states will necessarily be less valuable than the states they replace. As mentioned in COP Resolution IX.6, the new stable state might involve the site still qualifying as a Ramsar site but under different criteria from before (thus requiring a new RIS).
- 4.76 The ecological character of a site at the time of designation may include values that are artificially altered as a result of human interference, and a later change in that ecological character might involve a shift to a new state resulting from natural forces which act to restore a *more* natural pre-designation equilibrium. Such a situation may produce both gains and losses, for example if artificial water-bodies which previously held high numbers of waterbirds are breached and drained by a floodplain recovering its natural cyclical behaviour²⁹. Again, a fuller appreciation of the long-term history of the site will help in setting objectives that can provide a rationale for weighing up the relative costs and benefits for conservation in such circumstances³⁰.

²⁷ Gordon *et al.* (2010).

²⁸ Hobbs *et al.* (2009).

²⁹ This example is based on a real case involving the Koshi Tappu Ramsar site in Nepal in 2008.

³⁰ See also comments in Pittock *et al.* (2010).

No dilution of the imperative to resist unjustified change

- 4.77 Attempts to cater for baseline shifts in the ways described above are sometimes met with concern that they signal a more “laissez-faire” attitude to conservation and restoration, and that they risk “opening the floodgates” to unjustified change that previously would have been resisted or remediated³¹. This concern is very valid; and it is not easy to design workable “checks and balances” in policy that will distinguish (a) genuine irreversible (and/or even desirable) shifts from (b) claims by vested interests that something has irreversibly shifted when it has not. This would be worth further attention in future; and meanwhile precaution must be the underlying principle.
- 4.78 In normal circumstances, Parties continue to be expected to avoid change where it can be avoided, mitigate (including restoration) where it can not be avoided, and compensate where it can not be avoided or mitigated. Extensive guidance has been adopted on various elements of this sequence, on the sequence as a whole, and on the different scenarios which may give rise to it³².
- 4.79 Changed baseline conditions at a catchment, national or regional scale may render it ecologically impossible to provide meaningful “like-for-like” compensation in some cases where it is also impossible (for reasons of the same shifted baseline) to prevent or restore a loss of wetland values in a Ramsar site. Compensation in the form of “unlike” measures may then have to be accepted. Such cases may arise under the terms of Article 2.5, Resolution IX.6 or Resolution VII.24 (acting in conjunction with Article 3.2), but in each of these different contexts there is provision for scrutiny by the Secretariat and the COP of the reasoning applied, which would extend also to the process of submitting a revised Ramsar Information Sheet and Ecological Character Description (i.e. a new baseline) for the original site³³.

Reporting change (“passing information without delay”)

- 4.80 One of the biggest continuing problems with Article 3.2 is that only a small minority of instances of change or likely change as defined by the Article are reported in the way that it requires, despite this requirement being a strict and unqualified one (as described at the beginning of the present section).
- 4.81 The Parties at COP 8 felt that the situation might be improved by creating a simple standard format for Article 3.2 reporting, and a request was made in Res. VIII.8 for such a format to be developed. The idea was that this would encourage some degree of consistency, and would provide prompts as to the kind of information which would give a minimum of necessary intelligence to

³¹ An example of the genuine difficulty in distinguishing different types of change in this context is shown by the long-running case of an ecological “regime shift” exhibited by the Rio Cruces Ramsar site in Chile, discussed in Marín *et al.* (2006) and Lagos *et al.* (2008).

³² See the summary account in Annex C of the present report.

³³ This point is spelled out partly as a response to an argument in Pittock *et al.* (2010): writing about six Ramsar sites in the Murray-Darling basin in Australia which have been subject to synergistic effects of water diversion/abstraction and climate change, they suggest that there is a lacuna in the Convention’s provisions for responding to (and scrutiny of) unavoidable and unrestorable change which requires a re-writing of a site’s RIS and ECD but does not require a triggering of Art. 2.5. The text above suggests instead that provisions for this do exist, and the deficiency lies instead with inadequate implementation of Articles 3.2 and 8.2 (in combination with Res. VII.24). Compensation issues are discussed further in section 6 below.

allow the change issues concerned to be documented, understood and (if appropriate) acted upon.

- 4.82 The Secretariat in 2005, and Wetlands International in 2006 (in its capacity as administrator of the Ramsar Sites database) both drafted proposals for such a format. Ultimately however the issue was tackled by suggesting that Parties use the “change” column in the Ecological Character Description sheet (Resolution X.15). This column invites information on any changes or likely changes in each aspect of ecological character described on the sheet, by reference in particular to “limits of change” defined, for example, in relation to management plan objectives. A copy of the ECD sheet itself, with this information included, can then simply be submitted to the Secretariat each time an Art. 3.2 report for any relevant issue affecting the site is required. In practice this process has seldom been used, and reporting rates remain low.
- 4.83 One common tendency is for Parties to be prompted by the occasion of submitting a triennial national report for a COP, to include Ramsar site ecological character change information there. This however is not sufficient for compliance with Art. 3.2: as soon as information is available to the Administrative Authority there is no leeway in the requirement to pass it on to the Secretariat, since the stipulation is an unqualified “without delay”.
- 4.84 A majority of instances of Ramsar site ecological character change/likely change are first brought to the Secretariat’s attention not by the national Administrative Authorities (AAs) but by third parties, such as NGOs. (The Secretariat then always contacts the AA for verification).
- 4.85 Much other intelligence that is relevant, whether originating first from the AA or elsewhere, and then becoming clarified through iterative conversations or correspondence, does not necessarily refer to Article 3.2, or use the language of the official process of the Convention. It may arise in a different context altogether. A key part of getting the Article to work fully as intended will be to recognise that this is inevitable, and to equip those who are conversant with the system to spot the relevance of information coming from those who are not, and to help in making the necessary connections.
- 4.86 Organisations and individuals with Ramsar site-related responsibilities within a country, including those at local level such as site managers, may not always be aware of the Article 3.2 requirement and the way it should operate, even though these are the people most likely to detect the issues it is designed to address. In-country awareness of the requirement, and clarity about chains of communication for operating it, should be a priority issue for capacity-building efforts.
- 4.87 It is not necessary for this to be done in the particular terminology of Convention texts, and it may often be better “translated” into appropriate local operational contexts; as long as the link is made to the AA who can “translate back” for their own purposes of formally reporting to the Secretariat.
- 4.88 Concerning the role of the AA, formally the requirement is simply that information should be passed without delay. In principle this could be achieved by means of any kind of message from the AA to the Secretariat, provided that the communication is stated formally to be for the purposes of Article 3.2.

- 4.89 The main advice texts on this, such as Resolutions VIII.8 and X.16, make a mixture of references to “reporting”, “making” a report and “submitting” a report; which could be variously interpreted as allowing informal verbal information or requiring formal submission of a document. In order to be unambiguous about the status of the information, it should in all normal circumstances be provided in writing; although in the interests of rapidity the first “alert” message, at least, can be very brief.
- 4.90 Issues concerning the steps which occur once the Secretariat receives a report are discussed separately in section 5 below. This includes the scope for informal dialogue to clarify instances where it may not be certain whether a relevant ecological change issue is present or not, and this is also discussed in section 5. As ever, the general approach should be precautionary, in other words “if in doubt, report”. The emphasis of the whole system is on triggering awareness and dialogue, rather than in-depth analysis; and excessive bureaucracy should be avoided.
- 4.91 Article 3.2 focuses on the presence of negative information. In theory it might also be relevant to consider the absence of positive information. The Convention makes systematic provisions for descriptions of the ecological character of Ramsar sites³⁴ and the periodic updating of Ramsar Information Sheets³⁵, with the latter seen as having an important role in monitoring change³⁶. These provisions are not yet fully followed by all Parties, which means in some cases there is no positive information to indicate that the ecological character of a country’s Ramsar sites has *not* changed.
- 4.92 It has been suggested by some consultees in the present review that in the absence, over a period of more than six years, of any positive information (i.e. officially via RIS updates and national reports) about the maintenance of ecological character at a Ramsar site, the site should be deemed at that point to be at risk of changing or having changed until the AA indicates otherwise, thus counting as a “default” Art. 3.2 report. This would help to correct the overall underestimation of change affecting sites in the List, and would act as an incentive for fuller adherence to the process for periodic RIS updating.

The global overview

- 4.93 As well as Article 3.2 reports providing important tracking data on the status of Ramsar sites, and acting as a trigger for potential problem-solving assistance arranged through Ramsar channels, a further important purpose is for the COP to be able to safeguard its collective interest in observing equitable compliance with the Convention. Although Parties retain exclusive sovereign rights over the Ramsar sites in their territory (Article 2.3), the sites are part of a global network, and the significance they represent is a shared concern of the global community of all Parties acting together.
- 4.94 Under Article 8.2 of the Convention, therefore, the Secretariat has the function of forwarding notification of “any alterations to the List, or changes in character of wetlands included therein, to all Contracting Parties and to arrange for these matters to be discussed at the next Conference”. Under

³⁴ Resolution X.15.

³⁵ Resolution VI.1.

³⁶ Mentioned for example in Resolution XI.8.

Article 6.2 the COP is empowered to consider Article 3.2 information and to make “general or specific” recommendations to Parties in response.

- 4.95 Intersessional provision has also been made for this. Following a proposal by BirdLife International in 2007, the Standing Committee agreed that it would thereafter have a regular item on the agenda for all of its meetings to consider reports on Ramsar site status³⁷. This could potentially be enhanced by tasking the regional representative members of the Committee (in their Terms of Reference) with marshalling relevant information from their regions in advance of the Committee meetings, supported perhaps by a list of sites provided by the Secretariat which would indicate earlier Art. 3.2 reports in need of updating.
- 4.96 Although the Convention has given some profile to the selective (and now largely dormant) list of Article 3.2 instances compiled in the Montreux Record (discussed in section 7 below), probably a greater priority is for a complete global overview list of *all* Article 3.2 instances to be well maintained and kept up to date. This now falls within the scope of the Ramsar Sites Information Service, discussed in section 5 below.
- 4.97 In principle this list should operate as a foundation element of a number of other Ramsar site status & trends assessment processes at global synthesis level. Many of these processes are currently in a state of developmental flux, and the subject lies beyond the scope of the present report; but examples include the Global Wetland Observing System (GWOS), the State of the World’s Wetlands and their Services report (SOWWS), Ramsar input to the Global Biodiversity Outlook reports (GBO), Ramsar site management effectiveness tracking³⁸ and other Ramsar ecological outcome-oriented indicators of implementation effectiveness³⁹. IUCN’s global “Conservation Outlook” assessments of natural World Heritage sites potentially also offers a model which could be applied to Ramsar sites⁴⁰.

Responses to change

- 4.98 Article 3.2 revolves around the passing of information. It implies nothing in itself about action which may or may not follow from the passing of such information, and is thus not concerned with responses to the change or likely change in ecological character that is reported. Reference has been made above to recommendations made by the COP under Art. 6.2 in response to Art. 3.2 information provided via Art. 8.2; and sections 7 and 8 below discuss the Montreux Record and Ramsar Advisory Missions respectively. Otherwise the question of response options is beyond the scope of the present report.

Risk-based approaches

- 4.99 Management of the variability of wetland ecosystems necessarily deals in probabilities rather than certainties. This is perhaps especially true for some of the issues discussed above concerning prediction of “likely” change, distinguishing “natural” change from human influence, and deciding

³⁷ Standing Committee Decision SC35-28 (2007).

³⁸ Draft COP12 Resolution in preparation.

³⁹ Resolution XI.1 Annex D.

⁴⁰ IUCN (2012).

thresholds of significance. A number of references have been made in this context to risk assessment and precaution.

- 4.100 It would probably be valuable to develop more complete wisdom on modern “risk management” concepts and approaches as a shaping philosophy for the Ramsar regimes governing Article 3.2, ecological character monitoring, change assessment and associated response options in general.
- 4.101 This would be an appropriate context within which to develop further advice on taking a precautionary approach to matters of uncertainty. Some discussion of this has previously been provided in COP documents⁴¹, but the COP has not adopted guidance on it as such. The STRP’s 2013-15 work programme included a task (20d) to “prepare advice on the need for and scope of guidance on the application of a precautionary approach in the Ramsar Convention”, but work on this has not yet advanced.
- 4.102 Making decision systems and the criteria for them more “risk-based” in general would involve going beyond considerations of risk assessment, to include ways of making explicit the chosen levels of risk which can or cannot be tolerated in given circumstances (the “risk appetite”); and ways of documenting a transparent audit trail of the judgments made about the management of identified risks.

⁴¹ COP10 document Doc. 27 (which includes reference to the treatment of candidate Ramsar sites in this context) and COP11 document Inf. 24.

5. The Ramsar Sites Information Service and the Article 3.2 process

- 5.1 The Ramsar Sites Information Service (RSIS) is the current incarnation of what was previously known as the Ramsar Database/Ramsar Sites Database. It is a web-accessible structured repository for standardised data on Ramsar Sites, with analytical tools at a metadata level, and information on each site compiled (by Parties) in Ramsar Information Sheets (RIS)⁴².

Site change information in the RSIS

- 5.2 Resolution VI.13 (1996) urged Parties to revise the data in Ramsar Information Sheets at least every six years, “for monitoring purposes”. One “monitoring purpose” is to ensure that baseline descriptions of sites are accurate and up to date, and this has probably been the primary motivation for updating individual RIS’s over the years.
- 5.3 The implication, however, is that “monitoring purposes” also include a role for RIS updates in revealing change. Some caution is required here. The central part of the RIS is a substantiation of the site’s qualification as “internationally important” against the Ramsar criteria. Over the years, emphasis has increasingly been put also on the role of the RIS in summarising the “ecological character” of the site (as most recently defined in Resolution IX.1 Annex A); and guidance refers to ecological character as including “key features of the ecological character” which are “those identified as the justification for designation under each Ramsar Criterion applied to the designation”⁴³.
- 5.4 This approach has created the risk of a perception that monitoring change in international importance, as formally stated in the RIS, is the same as monitoring change in ecological character. Following the enhancements to the RIS agreed in 2012 (Resolution XI.8), the description of the site’s ecological character given in the Information Sheet should allow it to be a more useful baseline for monitoring than before. As is made clear in Ramsar Handbook 19 however, a site can experience change in its ecological character without necessarily experiencing a change in its international importance. Moreover, as shown in Resolution IX.6 (paragraphs 6(vi) and 6(vii)), a site can experience a change in international importance without necessarily experiencing a change in ecological character.
- 5.5 Hence any change in the reasons why the site meets the criteria needs to be treated in a clearly-distinguished way from the different (and more “fine-grained”) issue of change in its ecological character. In the context of Article 3.2, of course, periodic RIS revisions will normally serve as little more than a place where information may be retrospectively aligned with the “real time” information that has been compiled “at the earliest possible time” and reported “without delay” under the provisions of the Article.

⁴² The current version of the RIS was agreed by COP11 and is available as Annex 1 to Resolution XI.8 (2012).

⁴³ Guidelines for completing the Information Sheet on Ramsar Wetlands; most recent version contained in Annex 2 to Resolution XI.8 (2012) - see in particular paragraph 276.

- 5.6 In addition to Information Sheets on Ramsar sites, the Parties in Resolution 5.4 (1993) instructed that the Montreux Record should be maintained as part of the Ramsar Database (now the RSIS). Further, in Resolution VIII.8 (2002) this was extended to cover “Article 3.2 report information” in general.

Enhancing and streamlining the system

- 5.7 Task 25 in the STRP’s work programme for 2013-2015 includes the development of “tools and mechanisms for enhanced and streamlined Ramsar Site designation and data and information management, including redevelopment of the Ramsar Sites Information Service and on-line submission tools for RIS”.
- 5.8 The present report has been compiled partly in tandem with the work undertaken by the Secretariat and UNEP-GRID towards the Task 25 RSIS redevelopment. Input to the latter from the present work has been made by means of meetings in the Secretariat in May 2014, and by contributing to on-line testing of a prototype database module. Some of the key points arising are summarised below.
- 5.9 The main enhancements to result from this process will be an increase in unification, standardisation and transparency of the system. Concerning ecological character change issues, a more integrated approach will be adopted towards the information management aspects of Article 3.2 reporting, the Montreux Record and the Ramsar Advisory Missions process. A single Article 3.2 instance may involve one or both of the other elements, either simultaneously or in sequence; and all of them (and transitions between them where applicable) will be encompassed by the same tracking system.

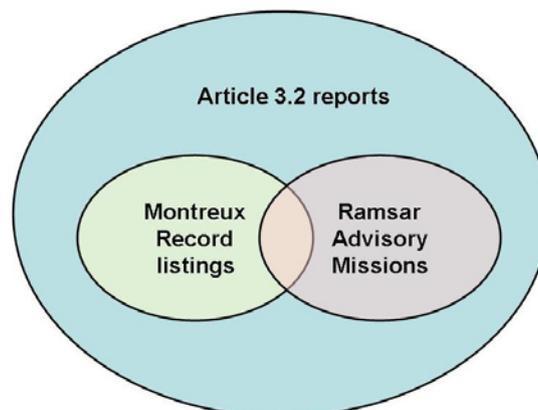


Figure 4a: Integrated information structure for ecological character change

How are Article 3.2 related entries in the RSIS initiated?

- 5.10 As discussed earlier, Article 3.2 itself offers no guidance on what threshold of seriousness might be the basis for triggering a report, and assumptions about this have varied. Reporting to a Convention process may be treated in some quarters as a more high-level and formal act than it is in others. Colloquial reference to Article 3.2 “cases” risks creating an impression that the threshold is akin to that which would apply to initiating a legal “case”.
- 5.11 Setting the bar too high in this way will unduly limit the benefits that Article 3.2 can offer to a range of “low level” instances. Setting it too high in some

places and not in others will lead to inconsistent use of the Convention. The steps for deciding whether a given instance should be registered as an entry in the Article 3.2-related part of the RSIS are therefore important.

- 5.12 Internal guidance has now been compiled to direct these decision-making and authorisation steps, including both a basic initial “triage” classification of seriousness and the involvement of the official Ramsar Administrative Authority (AA) for the country concerned. If the need to record change or threatened change in the context of Article 3.2 is first perceived by the Secretariat⁴⁴ or is reported by a third party (eg an NGO), referral to the AA is required.
- 5.13 If there are differences of opinion between the AA and others, either about the content of the information or about its inclusion in the database, some negotiation may be necessary. In principle the database should be capable of providing a complete picture (especially for analytical purposes) of all the instances of Article 3.2-related change/potential change that exist, rather than only those where a particular degree of consensus has been reached about their inclusion. In practice, however, wherever possible, information should be validated by the AA. The database will hold their original correspondence.
- 5.14 In probably the majority of instances where information brought to the attention of the Secretariat is relevant to be addressed by this system, the initial informant may not be aware of the specific provisions that apply, and they may not use the particular Ramsar vocabulary of “Article 3.2” and “change in ecological character”. Judgement is therefore required to spot and interpret relevance in this respect. This also means that, despite the best of intentions, specially-designed pro-formas for reporting change under Article 3.2⁴⁵ are unlikely in practice to be the most frequently-used means of making such reports, and relying only on these will risk overlooking many instances that should be recorded. Some pragmatism in this is required, and the system must continue to be open to receiving (or “deducing”) reports in a variety of ways.

What is the “unit of attention” for tracking purposes?

- 5.15 Pragmatic choices also have to be made about how to define the “unit of attention” that travels through the RSIS tracking system. In effect the unit is a *story* about a particular Article 3.2 problem affecting one or more named Ramsar sites.
- 5.16 Organising this according to (Article 3.2) “reports” might not give a coherent result, because several reports from different sources might all relate to the same problem at the same site.
- 5.17 The Ramsar site(s) concerned obviously must be identified, but organising the system only according to “sites” would not be adequate to track different problems occurring at different times on the same site; and could also be

⁴⁴ In future this ability could potentially be enhanced by proactive cross-checking against (for example) the periodically-updated lists of World Heritage in Danger (UNESCO) and Important Bird Areas in Danger (BirdLife International).

⁴⁵ Resolution VIII.8 (2002) directed the Secretariat to prepare a simple format for Article 3.2 reporting. Proposals for this were drafted, but ultimately the issue was tackled by suggesting that Parties use the “change” column in the Ecological Character Description sheet (Resolution X.15). See Annex B below for further details.

problematic when a single problem at one moment affects more than one Ramsar site.

- 5.18 Colloquially it makes sense to think in terms of the units being individual “cases” of change/potential change in ecological character that qualify under Article 3.2. This would distinguish different problems at different times, would accommodate multiple “reports” all relating to the same “case”, and could also relate a single problem at a single moment to more than one Ramsar site. The difficulty however is the perception in some places that use of the term “case” implies a serious allegation of Convention infringement, and thus could deter use of the system for all but the most major diplomatically-escalated instances.
- 5.19 An alternative might be to consider referring to Article 3.2 “files”; although this could suffer the same drawbacks as using the term “case”, and it is also vaguer in its meaning. Where sensitivity on this point is important, the present report speaks of “instances” of Article 3.2 change; but this is a term of convenience rather than a firm proposal, and further views on this issue (including on different language translations of the terms) should be sought.
- 5.20 It is important to be able to search the database according to site name and threat type, so every “instance” should be tagged with these identifiers in any case. Controlled vocabularies and classifications for threat types will be important to this. The data-entry screen includes a field headed “issue summary” in which uncontrolled free-text key words can be entered. This is probably a useful way of giving an intuitive rapid description of the type of problem at issue, or the nature of the “story”, so should probably be retained. It may however need to be associated with a controlled list of threat types. The most obvious source for such a list is that given in field 30 of the Ramsar Information Sheet (further interpreted in Appendix F of Resolution XI.8 Annex 2): a numerical coding system could be applied to this list, and the applicable code(s) simply added in the “issue summary” of the RSIS table alongside the free text entry.
- 5.21 The database should be capable of being searched by site name, country, threat type, dates, and perhaps a variety of other attributes. Notwithstanding such multi-functionality, however, there are presentational choices to make about the primary or default basis on which to display directories of the information held. This could for example be according to date (e.g. most recent “instance” first), or alphabetically by country, or grouped by region, or grouped by “higher-level” threat categories. Ideally, a drop-down menu tab might allow the user to switch between any of these.

Handling the ways in which individual instances relate and evolve

- 5.22 A given instance of change/threatened change in ecological character may begin as a simple story about one event at one site. This one story however might be reported by different informants with different views of the facts. The initial story might be a summary of several distinct but connected sub-stories, each relating to different issues or areas. It may alternatively (or also) be part of a bigger story which is partly reported in another place in the RSIS system (e.g. at an earlier time, or in relation to a different site).
- 5.23 Categorising and filing the particular “instance” therefore may require an awareness of common factors that imply links to other entries in the

database, even though those links are not explicit in the initial information received. Appropriate forms of geo-referencing and coding may allow areas identified by vernacular or sub-area names to be cross-matched to relevant Ramsar sites even where the Ramsar site name has not been correctly used. In most respects, however, informed judgement will play an important part, and decisions may need to be made about which data-packets belong together, which of them need subdividing, and which might need reclassifying in the light of earlier decisions about related entries.

- 5.24 Any of these issues may arise at a later stage even when they did not feature at outset. An individual Article 3.2 story may stop and re-start with different attributes although it is essentially the same story and should be “tracked” as such. It may fragment into sub-stories, grow, spread, become more significant, join with other stories or evolve in other ways over time. It will be a matter of judgement as to which element(s) of it should be kept constant while others change, so that the tracking “audit-trail” can be followed coherently in these circumstances.
- 5.25 As far as possible, a consistent attitude should be taken to all of these matters of skilled judgement. It may not be possible to codify every nuance of this in an RSIS “operators’ manual”, and provision should therefore be made for “hands-on” skills transfer whenever there is a change of staff responsibility.

How might a given instance become a “closed file”?

- 5.26 Reporting under Article 3.2 is only a means to an end, and although not addressed in the Article itself, in principle the resulting outcome for the site(s) concerned should be part of the story that is tracked and documented in the RSIS. As long as the initial issue continues to be unresolved, the system can be used to trigger different types of response, such as those mentioned in Resolutions VIII.8 and X.16 (see Annex B below).
- 5.27 Ultimately in most cases there will be an outcome which represents a stable terminal state; either a negative one (if the site has been lost or is irretrievably negatively changed), or a positive one (if the initial problem has ceased to apply or has been conclusively solved).
- 5.28 The RSIS should distinguish “live” files from “closed” files. The decision to consider a file as “closed” may often be a matter of judgement, since proving the absence of a threat is usually not as clear-cut as proving the presence of one. It is valid to take a conservative approach to this; but, that said, it is probable that the Convention has erred too far on the side of caution in the past. There are credibility risks in maintaining a long list of files that remain “open” for many years without any action being taken and without any other change in the situation taking place.
- 5.29 Provision has been made in the redeveloped Ramsar Sites Information Service for the Secretariat to decide that an instance has been resolved or a file is no longer active, and to mark the file as closed. Closed instances should remain in the database as part of the history of the sites concerned, and to facilitate retrospective meta-analyses.
- 5.30 “Active resolution” might be signalled by removal from the Montreux Record (according to the steps agreed separately for that - see section 7 below) or by

other unambiguous evidence. The thresholds of confidence and verification used for this may need close supervision, at least until practice has settled for a period, to ensure that there is consistency over time and between regions, and to guard against premature closures.

- 5.31 “Inactivity resolution” might operate most systematically by a periodic review of each active file (say every year), and closure of any file where there has been no change after (say five) successive annual reviews.
- 5.32 It is essential to “date-stamp” all closure decisions: both for the overall audit/reporting-trail and because some closed problems re-open again at a later date, and their different phases should be distinguished. This may frequently occur where, for example, a particular wetland is a regularly tempting location for a development project which can only take place in that location, and where a sudden change in political or economic conditions can lead to the re-initiation of plans which previous conditions rendered supposedly “dead”.

Possible future enhancements of the RSIS

- 5.33 This report is not considering the RSIS as a whole. In relation only to issues of change in ecological character, therefore, three areas for further development in future are suggested, as follows:
- (i) developing experience-based accompanying guidance for data entry operators/moderators on the approach to take to the various qualitative judgements described in the present section above;
 - (ii) defining a distinct area/module of the database relating to instances where Article 2.5 has been invoked - see section 6 below (and here the term “cases” would be entirely appropriate);
 - (iii) continuing to increase the sophistication of search capabilities - this is likely to be a key determinant of use and utility of the database.

6. Articles 2.5 and 4.2

6.1 Article 2.5 of the Ramsar Convention states that “any Contracting Party shall have the right ... because of its urgent national interests, to delete or restrict the boundaries of wetlands already included by it in the List”. According to Article 4.2, “where a Contracting Party in its urgent national interest, deletes or restricts the boundaries of a wetland included in the List, it should as far as possible compensate for any loss of wetland resources”. Key aspects of existing guidance and interpretations relating to these two provisions are set out in Annex C below.

Article 2.5 - urgent national interests

6.2 Article 2.5 has rarely been formally invoked, although there is no fully definitive picture of this, since instances have not been systematically recorded. The process has also varied, including cases where a specific argued notification has been provided by the Contracting Party government to the Ramsar Secretariat or the Convention’s governing bodies, and those where it is expressed (or merely implied) in other ways.

6.3 Cases include the following:

- Schorren van de Beneden Schelde (Galgenschoor, Lower Schedt river), Belgium (1987-88): harbour expansion. Although the Belgian government never explicitly used the phrase “urgent national interest”, it was clear that it was following the Article 2.5 procedure. Partial restriction of the site took place and compensation was provided under Article 4.2. The case was the subject of a Ramsar Advisory Mission⁴⁶.
- Port Phillip Bay and Bellarine Peninsula, Australia (1997): chemical storage facility. Article 2.5 was formally invoked, but the development ultimately did not go ahead.
- Mühlenberger Loch, Germany (1997-2001): aircraft construction facility. Article 2.5 was formally invoked, the development took place and compensation was provided under Article 4.2. The case was the subject of a Ramsar Advisory Mission⁴⁷.
- Medway Estuary and Marshes, United Kingdom (2000-02): road development. The UK invoked Article 2.5 retrospectively in 2002, after the road scheme had been approved in 2000. Although the intention was to restrict the boundary of the site, there is no indication in Ramsar files as to whether this took place.
- Heden (Jameson Land), Greenland (2011): molybdenum mining. Partial site deletion was proposed in the context of Article 2.5, but the development has not proceeded.

6.4 One difficulty with this is that there is no standard understanding about the manner in which a formal indication should be given by a Party that it is invoking Article 2.5. The record above may be incomplete, because relevant information may have been conveyed by implication rather than explicitly, and it may have been amalgamated into communications on other matters. This contrasts therefore with the understanding about notifications of change/likely

⁴⁶ RAM report 1, Schorren van de Beneden – Schelde, 1988.

⁴⁷ RAM report 46, Mühlenberger Loch, 2001.

change under Article 3.2, and the steps involved with Montreux Record listing. As suggested in section 5 above, it would be desirable for all cases involving Article 2.5 to be systematically documented, and for a central list to be maintained as part of the Ramsar Sites Information Service.

- 6.5 There is also no standard understanding about the moment at which a formal indication should be given by a Party that it is invoking Article 2.5. The Article is clear that a report must be submitted to the Secretariat “at the earliest possible time” about the site deletion or boundary restriction changes concerned, but this could still be read as relating either to changes that are being contemplated or to changes that have been completed.
- 6.6 Logically, for consistency with Article 8 among other reasons⁴⁸, such reports should be submitted well in advance of the change taking place. The Convention text is somewhat inconsistent in the clarity with which it addresses this in Articles 3.2 and 2.5. Resolution IX.6 (Annex, paragraph 30) describes a procedure which Parties have agreed should be followed in order to achieve consistency in cases where site deletion or restriction is being considered for reasons other than those provided for by Article 2.5. Under that procedure, the report is to be submitted when the Party “wishes to confirm” its “intent” to delete or restrict the site. It would be logical to take the same approach in Article 2.5 cases as well. This logic is further supported by Resolution VIII.20 which states (Annex, paragraph 7) that “A Contracting Party, when notifying such changes to the [Secretariat], may request advice including from the Scientific and Technical Review Panel (STRP) and/or Standing Committee before any irreversible action is taken”.
- 6.7 Where a Ramsar Advisory Mission is associated with the case, the Mission report should offer information on lessons learned which might assist with other cases; but where a Mission does not take place, other ways of capturing relevant Article 2.5 experiences and making information about them available should be considered.
- 6.8 Prior to a decision formally to invoke Article 2.5, there may be a period during which the need to take this unusual step is debated. In addition to the cases above there are others where Article 2.5 has been informally or provisionally used in support of an argument, and/or where there has been uncertainty about whether or not it is relevant to the case. A trawl of files and reports might unearth useful learning experiences from these cases, but currently no systematic view of this is possible.
- 6.9 One example concerns debates as to whether a particular case should be viewed as one where urgent national interests apply, or whether instead it counts as one to which the regime in Resolution IX.6 should apply (i.e. sites or parts of sites which cease to meet or never met the Ramsar criteria, for reasons other than urgent national interest⁴⁹). Coongie Lakes in Australia (2002) and Lough Neagh in Northern Ireland, UK (2001-08) are prominent examples of this. Close study of the guidance appended to Resolution IX.6

⁴⁸ Article 8 provides for alterations to Ramsar sites to be discussed by the Conference of Parties, and for the COP to make recommendations to the Parties concerned about such alterations. The recommendations in a given case might relate only to matters of post-alteration follow-up, but otherwise (and presumably more commonly) they could only be acted upon if the COP is in a position to make them before the alteration concerned takes place.

⁴⁹ COP Resolution IX.6 (2005): Guidance for addressing Ramsar sites or parts of sites which no longer meet the criteria for designation. Supported by COP 9 Information Paper Doc.15: Issues and scenarios concerning Ramsar sites or parts of sites which cease to meet or never met the Ramsar criteria.

should assist in most cases, and no proposal to amend that guidance is made here.

- 6.10 There may be cases where a European Union government has invoked the “Imperative Reasons of Overriding Public Interest” test in EU law (see Annex C for explanation) for boundary restriction of a European “Natura 2000” site which is also a Ramsar site, but where they have not formally invoked Article 2.5 under Ramsar. The two tests are not identical (see the Mühlenberger Loch RAM background report for a discussion of some differences); but in some such cases there may in effect be a kind of unregistered “*de facto*” invoking of 2.5, and awareness of this possibility in the EU context could perhaps be improved.
- 6.11 Although the COP has adopted guidance on the circumstances for invoking Article 2.5 (see Annex C), and while in some cases the Party concerned has provided reasoning and substantiation when communicating its decision to the Secretariat, under the Article the only mandatory requirement is to report the decision itself. It would be more logical, for example again in the context of Article 8 (see above), and it would be more helpful for the Parties’ collective interest in fair application of these provisions, for such reports to detail the specific grounds on which “urgent national interests” are being asserted in the given case. Indeed the consequences of invoking the provision are sufficiently serious (changing a site protection commitment made in international law) to warrant this being a mandatory requirement. Resolution VIII.20 (paragraph 3) suggests some considerations which may form part of this reasoning, but fails, perhaps due to an oversight, to request that the actual considerations in a given case be reported.
- 6.12 Annex C below discusses the ways in which the presence of the two distinct elements concerned (a national-scale interest and a degree of urgency) might be substantiated. In two of the cases above, the grounds for the “urgency” asserted at the outset is thrown into question by subsequent events: in the Port Phillip Bay case the government felt able at a later stage to withdraw the proposal; and in the Heden case it became apparent that mining would only go ahead if market conditions became conducive, which three years later has not happened.
- 6.13 A question arose in relation to the Parc National de la Kéran Ramsar site (Togo) in 2001, concerning changes to national policies and procedures which it was felt might enable an urgent national interest to arise where it had not done previously⁵⁰. It seems clear that such a theoretical enabling step can not count as substantiation of the existence of an urgent national interest in the sense of Article 2.5. Partly this is because of the absence of the element of urgency; and partly it is because the existence of urgent national interest should be judged according to the specific reasons why a boundary restriction or site deletion is required in a given case, at a specific site at a specific moment.
- 6.14 When legal analyses of Article 2.5 were discussed in 2000⁵¹, Parties were reluctant to embark on developing detailed guidance on this, and some felt that doing so could be counterproductive⁵². The subsequent Resolution

⁵⁰ RAM report 45, Parc national de la Kéran, 2001.

⁵¹ See principally di Leva, C and Tymowski, W (2000), Pritchard (2000c) and Annex C of the present report.

⁵² See report of the 25th meeting of the Standing Committee (2000).

VIII.20 limited itself to a few generic principles. Debate still continues in some cases for example on what nature of interest is sufficient to qualify as the “national interest”, but reliance is probably better placed on good reasoned justification in individual cases (as mentioned above) rather than attempting extensive global definitions.

- 6.15 One implicit principle however may be worth emphasising more clearly in the light of experience since Resolution VIII.20. This is that the justification at issue is not meant to be the national significance of the policy initiative or development sector or existing infrastructure constituting the *context* for the proposed Ramsar site deletion or boundary restriction, but instead is the significance of the *incremental difference* that will be made *by the specific change* being proposed. It seems that this point is sometimes overlooked.
- 6.16 Discussion in the 2000 analyses of the legal test of a “state of necessity” mentions that to meet this test the act being challenged must be the “only means” of safeguarding the relevant essential interest of the State. This may be thought of as a “lack of alternatives” test, which features in different forms in systems such as some environmental impact assessment regimes and in the EU Habitats and Species Directive. One aspect of this which may be worth further attention is the question of the expected “area of search” for alternatives. In principle the scale of the area of search for an alternative to a development that would damage a site of ecological importance should be commensurate with the scale of that importance – meaning for example a nationwide search in respect of a site of national importance, a continent-wide search in respect of a site of African regional importance, and so on.
- 6.17 It may also be important to consider how to allocate the onus of proof of an absence of alternatives, and how to decide the standard of proof that there are no alternatives.
- 6.18 A further issue is the increasing possibility that (in cases of “shifting baselines” – see section 4 above), an ostensibly pro-conservation decision to favour a “do-nothing” or “no-project” initiative may in fact result in more harm to the Ramsar site than acceptance of an Article 2.5/4.2 “package deal” would do, if the latter (assuming “urgent national interest” is duly proved) is a means of unlocking overall net gain (through Article 4.2 “compensation plus”) that would not occur otherwise. Legal regimes which rely too simplistically on a “lack of alternatives” test as part of the approach to Article 2.5 may find it difficult to avoid having to decide in favour of a theoretical “zero deliberate damage” alternative, even though it may lead to overall net loss and the foregoing of gain. Revising such imperatives in a way that does not open the door to abuse, however, remains a difficult challenge.
- 6.19 The “urgent national interests” test only applies to cases where a Party intends to delete or restrict the boundaries of a listed site. No such test is required where the Party may be planning to allow a change in ecological character without any intention to delete or restrict the boundaries of the site. The magnitude of change in ecological character could however be the same in each of these scenarios; so this is an anomaly which might usefully be rectified by developing appropriate guidance in future.
- 6.20 Apart from the limited points above (and bearing in mind the low appetite of Parties for new guidance in this area), accumulation of relevant opinions will continue to be useful in future, as will better availability of case experience

(e.g. through more information being provided in submissions supporting Article 2.5 cases, creation of an “Article 2.5 reports” area in the RSIS, and more creative use of RAM reports, as discussed in section 8 below). Refined guidance on efficient operation of the *processes* involved (as opposed to legal interpretations etc) would be worth considering, drawing on the points recommended above.

Article 4.2 - compensation

- 6.21 Article 4.2 provides as follows: “Where a Contracting Party in its urgent national interest, deletes or restricts the boundaries of a wetland included in the List, it should as far as possible compensate for any loss of wetland resources, and in particular it should create additional nature reserves for waterfowl and for the protection, either in the same area or elsewhere, of an adequate portion of the original habitat”.
- 6.22 The provision is clearly linked to the circumstances defined in Article 2.5, and consequently the trigger for compensation under Article 4.2 is not the ecological character change itself, but instead the administrative decision that the designation should be changed.
- 6.23 Article 4.2 has also been linked by subsequent COP decisions to certain other situations, namely those described by Resolutions 5.3 and IX.6 (sites that never met the Ramsar criteria or which cease to meet the criteria for reasons other than urgent national interests). Resolution VII.24 addresses compensation more generally: it may be relevant to these situations alongside Article 4.2, and in any event is applicable to all other cases of loss of wetland habitats and functions. Both Resolution VII.24 and the later Resolution IX.9 give guidance on following a strict decision-making sequence of “avoidance, minimisation and compensation, the latter only as a last resort”; which is also relevant to Article 4.2, since invoking Article 2.5 should be a “last resort” in this sense.
- 6.24 Annex C summarises the guidance provided by these frameworks, and highlights related principles set out in other decisions of the COP. It also incorporates experiences from key individual cases, including Ramsar Advisory Missions. It could be useful to package together this information in a different form, perhaps with expanded case examples, as a practical “how-to” guide. An investment in high-specification design for this, with multiple graphics, tabbed/colour-coded sections, translation into different languages, on-line/app versions etc, could be worth investigating.
- 6.25 Much wetland-related compensation takes place without needing to involve formal notification processes under the Ramsar Convention. In two particular circumstances, however (which may overlap), such processes are involved; namely cases where Article 4.2 is applied, and cases where the Montreux Record and/or a Ramsar Advisory Mission is involved.
- 6.26 There is currently a gap in the requirements applying to these circumstances, namely that no provision is made for following up and discovering the outcomes of the compensation measures taken. In Montreux Record cases this might conceivably feature in the steps for agreeing removal of a site from the Record (see section 7 below); but in respect of Advisory Missions in general and in respect of the application of Article 4.2, follow-up will only happen by chance or may not happen at all.

- 6.27 Given the rigour of the safeguards and verification steps built in to the parts of the process that trigger compensatory measures, it is somewhat asymmetrical for the Convention not to require verification of the outcome of these measures. If well-intentioned compensation fails or otherwise has results that are different from those intended, further corrective steps may be necessary; and currently no provision is made for this. Even where everything has worked successfully, opportunities for positive lesson-learning are probably being lost for the same reason.
- 6.28 Some simple guidance on follow-up information to be provided by the Contracting Party concerned (and on deciding the appropriate time interval for this), accompanied by periodic checks by the Secretariat to ensure that files are complete in this respect, could help to fill this gap.
- 6.29 Compensation regimes generally, with Ramsar's being no exception, naturally urge a "like for like" approach, where what is provided should approximate as closely as possible to what has been lost (with the addition of safety margins for inevitable uncertainty)⁵³. This is a logical way of serving an overall goal of no net loss of value. It may sometimes however need to be tempered by a consideration of predicted trends in the original resource, or in other words the same "shifting baselines" issue that is referred to elsewhere in this report.
- 6.30 If the area that is due to be lost would have changed naturally over time, or would have been rendered non-viable by wider-scale unpreventable factors (such as sea-level rise or long-term reduction in rainfall), then efforts to reproduce exactly the same ecological values in a compensatory wetland nearby might be fruitless.
- 6.31 Decisions on the right course of action in these situations must be case-specific and are difficult, given their reliance on predictions in a context of uncertainty. Again the discipline of step-wise decision-making will be important (eg first substantiate the unworkability of a "like-for-like" solution, and only then move to considering alternatives). Substantiation at each step in this way is necessary to guard against abuse, for example by "like-for-like" solutions being abandoned prematurely for unjustifiable reasons (such as speed or cost).

⁵³ See Resolutions VII.24 and VIII.20.

7. The Montreux Record

- 7.1 The Montreux Record was established by the Parties in 1990, by Recommendation 4.8⁵⁴. It was initially seen as “the principal tool of the Convention for highlighting those sites where an adverse change in ecological character has occurred, is occurring, or is likely to occur, and which are therefore in need of priority conservation attention”; and its purpose was defined as “to identify priority sites for positive national and international conservation attention, to guide implementation of the [Ramsar Advisory Missions] procedure, and to guide allocation of resources available under financial mechanisms”⁵⁵.
- 7.2 Listing in the Record is not predicated on an alleged breach or potential breach of the Convention’s requirements, but rather on an issue of ecological change where help or advice may be required. Positive response options have been set out⁵⁶, one of which is the Ramsar Advisory Mission process (discussed separately in section 8 below). A site can only be included with the approval of the Contracting Party concerned; and when the risk of change in the site’s ecological character has ceased or has been averted, it can be removed.
- 7.3 The process is described further in Annex D below, which summarises existing guidance and interpretations.

Scope of the Record vis-à-vis Article 3.2

- 7.4 It is logical to presume that the scope of the Montreux Record was intended to correspond to the scope of Article 3.2 of the Convention, namely to concern instances of change or likely change in the ecological character of a listed Ramsar site that are (a) negative and (b) human-induced.
- 7.5 Recommendation 4.8 was ambiguous about this, referring only to “change in ecological character”; but at the following COP, Resolution 5.4 adopted the wording from Article 3.2 which refers to change “as a result of technological development, pollution, or other human interference”, while Resolution VI.1, by which the current guidelines were adopted, clarified that it should also be limited to adverse change.
- 7.6 The voluntary questionnaire designed for collecting basic information for Montreux Record listings, appended to Res. VI.1, includes questions on the “nature of the change in ecological character/potential for adverse change” and “reason(s) for adverse change, or potential adverse change, in ecological character”, without referring to the “anthropogenic” restriction.
- 7.7 The ambiguity has featured in some individual cases, for example that of the Ría Lagartos Ramsar site in Mexico, which was included on the original 1990

⁵⁴ COP4 was held in Montreux, Switzerland; hence the name given to the Record.

⁵⁵ These quotations are taken not from Rec. 4.8 but from Resolutions 5.4 and VI.1, which elaborated the COP’s original intentions for the Record and set out guidelines for its operation.

⁵⁶ See for example Resolution VIII.8 (2002).

Montreux Record list primarily for reasons of change caused by a hurricane event⁵⁷.

- 7.8 The triggering of Article 3.2-related mechanisms is restricted to cases of changes that are negative. The Montreux Record however, because it includes a prescribed procedure for removing sites from the Record when problems have been solved or have abated (see Annex D below), acts also on occasion as a *de facto* method for recording positive changes, in that sense.

The scale of the aspiration

- 7.9 In the paragraph preceding the one that introduced the Montreux Record, Recommendation 4.8 requests Parties to take action to prevent or remedy any change or likely change in ecological character affecting sites (taken to mean Ramsar sites) in their territory. The next paragraph then instructed the [Secretariat] “to maintain a record of Ramsar sites where such changes in ecological character have occurred, are occurring or are likely to occur”.
- 7.10 It seems clear therefore that at this stage the aspiration was for the Record to include every case of “Article 3.2” change that arose. At the time of COP4 the Ramsar List contained approximately 500 sites (less than a quarter of today’s number); and a review of sites facing relevant change listed just 46 sites in 23 Contracting Parties⁵⁸. Such an aspiration in this context would have appeared very reasonable.
- 7.11 Even though Article 3.2 reporting takes place on far fewer sites than truly merit it (as discussed in section 4 above), the volume of such information has increased since 1990. Perhaps for this reason, the expectations expressed for the Montreux Record have gradually changed from implied complete coverage of all Article 3.2 cases, to a more selective coverage of a sub-set of cases.
- 7.12 This trend was already apparent in the Record’s first decade. A review in 2000⁵⁹ suggested that the Standing Committee might consider making explicit the purpose of the Record as a distinct sub-set of the generality of Article 3.2 cases. Res. 5.4 had already defined the purpose of the Record as to “identify priority sites for [...] attention”, but had not said anything about the basis for such prioritisation. Moreover Res. VIII.8 interpreted “priority for attention” in Res. 5.4 as synonymous with facing Article 3.2 change, in other words not a sub-set of the generality at all⁶⁰.
- 7.13 Options suggested in the 2000 review were to use the Record to address the most serious cases, to use it for those where special sources of funding or advisory assistance need to be unlocked, and to use it primarily as a generator of “case study” information for wider consumption.

⁵⁷ The site was damaged by Hurricane Gilbert in 1988, was addressed by a Ramsar Advisory Mission (then known as the Monitoring Procedure) in 1989, was added to the Montreux Record in 1990 and removed in 1996. There were associated concerns about potential expansion of salt extraction works, but it appears that the original motivation for Montreux Record listing was primarily the “natural” change caused by the hurricane.

⁵⁸ COP4 Document Doc. C.4.18, Review of implementation of the Convention.

⁵⁹ Pritchard (2000b).

⁶⁰ Paragraph 21 of Res. VIII.8 states: “... the Montreux Record is the principal tool of the Convention for highlighting those sites where an adverse change in ecological character has occurred, is occurring, or is likely to occur *and which are therefore* in need of priority conservation action...” [emphasis added].

- 7.14 The Parties eventually took this up in Resolution VIII.8 (2002), which advised that the Record would be useful in circumstances where it would be helpful to highlight “particularly serious cases”, to demonstrate national commitment to resolving the ecological character change concerned, to bring “positive national and international conservation attention” to the case, and to provide guidance in the allocation of resources available under financial mechanisms.
- 7.15 Resolution VIII.8 therefore confirmed that it was no longer the intention (assuming that originally it had been) for the Montreux Record to be a comprehensive list of sites facing “Article 3.2” change, but only to list those chosen at the discretion of Parties for particular attention in this way. The continuing obligation to report all instances under Article 3.2 remains unaffected however; hence a comprehensive list must continue to be maintained in addition to any such selective list.
- 7.16 A different way of filtering cases for inclusion in the Montreux Record was once suggested in 2008 by the government of Australia, in the context of change in ecological character at the Coorong Ramsar site. In debates on this in the “Ramsar Forum” email discussion group, Australia’s national Minister for Water and Climate Change was reported to have decided that sites would only be put forward for Montreux Record listing if “all locally generated remedial actions have been exhausted and where there is high probability that such a listing would assist in achieving improvements in the on-ground condition of the Ramsar site”. This however was felt by others to be a mis-reading of the intent of the relevant COP Resolutions. To date, the applicable guidance remains that given in Res. VIII.8.

Adjusting the questionnaire

- 7.17 The Montreux Record process includes a questionnaire⁶¹ that is submitted by a Party when requesting inclusion of a site in the Record, and (covering different questions) when requesting its removal. At COP8 it was noted⁶² that this questionnaire had been developed separately from the Information Sheet on Ramsar Wetlands (RIS), and was not wholly compatible with the RIS and the structure of the Ramsar Sites Information Service (RSIS, formerly the Ramsar Sites Database - see section 5 above)⁶³.
- 7.18 Accordingly a task was defined for the STRP to provide advice on redesigning the questionnaire, inter alia to harmonise it with the RIS and with Article 3.2 report forms⁶⁴. This task was not completed in that triennium: it was rolled forward into the STRP Work Plans of two successive triennia⁶⁵, but was never assigned high priority and thus remains uncompleted.
- 7.19 Since the present review (this section, further below) casts some doubt on the future role of the Montreux Record in general, there may be less need now to devote major energy to a harmonised update of the questionnaire.

⁶¹ Appended to Resolution VI.1.

⁶² COP8 Document Doc. 20 (2002), Assessing and reporting the status and trends of wetlands, and the implementation of Article 3.2 of the Convention concerning change in the ecological character of Ramsar sites.

⁶³ Resolution 5.4 further stipulated that the Montreux Record shall be maintained as part of the Database.

⁶⁴ STRP Work Plan 2003-05 (approved by Standing Committee, May 2003), task 5.3.

⁶⁵ STRP Work Plan 2006-08 (Res. IX.2), task 56; and STRP Work Plan 2009-12 (Res. X.10), task 4.7. At COP10 the Parties suggested in Resolution X.15 that a data field in the Ecological Character Description Sheet appended to that Resolution be used as the simple format for Article 3.2 reporting.

Nonetheless, some indicative suggestions on this are offered in the box below for discussion purposes in the meantime.

Montreux Record Questionnaire:

Indicative suggestions for amendments to the Res. VI.1 version, to harmonise it with the current RIS, Article 3.2 reporting and RSIS

Key: Struck-through text = proposed deletions

Underlined text = proposed additions

ECD = ecological character description sheet (Res. X.15 Annex)

RIS = Ramsar Information Sheet, 2012 version (Res. XI.8 Annex 1, and guidance in Annex 2)

Section One: Information for assessing possible inclusion of a listed site in the Montreux Record

Essential items:

- Name of site
- Ramsar Criteria for listing the site as internationally important
- Summary statement of ecological character (from ECD)
- Ecological components, processes and services affected by adverse human-induced change/likely change (list relevant code numbers from ECD)
- Nature and extent of the ~~change in ecological character/potential for adverse change/likely change~~ (use threat categories in RIS guidance Appendix F)
- Reason(s) for the change/likely change described above ~~adverse change, or potential adverse change, in ecological character~~

Additional items which may be included:

- Date when latest Ramsar Site Information Sheet on Ramsar Wetlands submitted
- ~~Date and source of Information Sheet updates (e.g. National Reports, national wetland inventory, specific survey)~~
- ~~Benefits and values derived from the site~~
- ~~Extent to which values and benefits derived from the site have decreased or changed~~
- Monitoring programme in place at the site, if any (technique(s), objectives, and nature of data and information gathered - refer to RIS field 34)
- Assessment procedures in place, if any (how is the information obtained from the monitoring programme used)
- Ameliorative and restoration measures in place or planned (if any) so far
- Any other analogous or linked site intervention processes activated or planned, e.g. under other MEAs
- List of attachments provided by the Contracting Party (if applicable)
- List of attachments provided by the Ramsar ~~Bureau~~ Secretariat (if applicable)

Section Two: Information for assessing possible removal of a listed site from the Montreux Record

- Success of ameliorative, restoration or maintenance measures (describe if different from those covered in Section One of this questionnaire)
- Proposed monitoring and assessment procedures (describe if different from those in Section One of this questionnaire)
- Extent to which the ecological ~~character, benefits and values~~ components, processes and services of the site have been restored or maintained (provide

details)

- Rationale for removing the site from the Montreux Record (refer to Guidelines for Operation of the Montreux Record, the specific issues identified in together with Section One of this questionnaire, and any advice given by the STRP and/or arising from a Ramsar Advisory Mission, where applicable)
- Status of any other analogous or linked site intervention processes, e.g. under other MEAs, and details of how Montreux Record removal will be harmonized with these
- List of further attachments (if applicable)

Relevance in cases of long-term change and irreversible change

- 7.20 As with Article 3.2, the Montreux Record is designed to address change which already has occurred, as well as change which is occurring or is likely to occur. This is a wise approach, partly for the obvious reason that past changes may be remediable and Article 3.2 reporting/the Montreux Record may be the means for stimulating such remediation; but also because attempting to define the dividing-line between change which has stopped and change which is on-going could in many cases be extremely problematic.
- 7.21 To the extent that it is tractable however, this distinction is relevant in cases where the “past change” pre-dates the Ramsar designation of the site. If such a change has clearly stopped before the date of designation, it may be relevant for setting post-designation management objectives for the site (e.g. for restoration), but (although neither the Convention text or the Montreux Record guidance spells this out) it would not be a reason for an Article 3.2 report or for Montreux Record listing.
- 7.22 If an ecological character change “is occurring”, however, it may be eligible for an Article 3.2 report or Montreux Record listing irrespective of whether the change began to occur before designation or after designation. If the change is on-going at the time the RIS and the Ecological Character Description Sheet are compiled it would also be noted in those documents.
- 7.23 Another scenario which has been questioned in specific cases is where change which “has occurred” is deemed to be irreversible by any means, because of the permanent and irrecoverable absence (for whatever reason) of an essential condition for maintaining the original ecological character of the site. This could for example relate to changes in climate or in macro-topography, or to species extinction.
- 7.24 In such cases, Montreux Record listing will not help in preventing or remediating the change. It could however be relevant to the framing of proposals for compensating for the irreversible loss, either by measures within the site or elsewhere. Compensation scenarios are defined in Article 4.2, Resolutions VII.24 and IX.6; and the question of judging “irreversibility” is addressed in Resolution XI.9 (see section 6 above).
- 7.25 Removal from the Record in such cases will be appropriate when fully adequate and successful compensation is completed. Although in one sense the position at Montreux Record listing (the ecological character “has changed”) will not have altered (the character will remain changed), it would not be helpful for the site to remain permanently on the Record in these

circumstances. The guidelines (Res. VI.1) are sufficiently open for this to be an appropriate justification, provided that adequacy and success of the compensation are properly demonstrated.

The process for removal from the Record, and the role of the STRP

- 7.26 As noted above, prior to removing a site from the Record, the questionnaire in Res. VI.1 asks the Contracting Party concerned to summarise the success of ameliorative, restoration or maintenance measures, the extent to which the ecological character of the site has been restored or maintained, and the overall rationale for removing the site from the Record.
- 7.27 According to the guidelines, completed questionnaires are then forwarded to the STRP to seek its advice. In the 2008-2010 triennium in particular, the Panel took the opportunity of removal requests directed to it in this way to consider in some depth the most effective way of contributing to this process⁶⁶.
- 7.28 Factors considered especially important by the Panel in this context included: being able to relate a removal request to the original information provided when the site was listed in the Record; evidence of whether the original threats/problem drivers had been removed; whether the necessary mitigation/restoration activities had been completed; whether the site's ecological character itself had been maintained or restored and the long-term future sustainability of this; and what kind of on-the-ground verification of any of these factors was being offered.
- 7.29 Resolution VIII.8 requests Parties to report regularly on sites in their territory which are listed on the Montreux Record, so consideration of removal cases should also include an examination of whether this has been done and what it has revealed.
- 7.30 Clearly there is likely to be a spectrum of situations from individual cases where independent review of scientific and technical aspects may be critical, to other cases where it will not. The STRP should have flexibility to give more or less full responses according to need on a case-by-case basis.
- 7.31 Nevertheless, in several cases the Panel found itself ill-equipped to make a critical scientific judgement of whether the conditions for removal from the Montreux Record had been met, because of a lack of adequate technical information on one or more of the aspects listed above, and/or on the scientific methods underpinning such information.
- 7.32 The STRP was fully aware that concerns of this kind raised implications for the work involved on the part of the Contracting Party concerned, and also on the part of the Panel's own review and assessment process, each time a site removal is proposed. There is also a language implication given that the Convention has three working languages but the STRP operates only in English. Resourcing and turnaround times therefore both need careful thought.

⁶⁶ Under the terms of Res. VI.1 the STRP also has an analogous role in relation to decisions to *add* a site to the Record, particularly with regard to determining what actions might be undertaken to address the problems affecting the site. This is perhaps a more obvious form of input to organise (even though the issues themselves may of course be complex), and the Panel has not felt the need to give it the same degree of procedural examination as the question of removals.

- 7.33 As one way of speeding up the collation of relevant information, at the STRP's 15th meeting in 2009 it was agreed to devise an internal tracking sheet to accompany the questionnaire for Montreux Record removals. Following consultations on a draft with the Secretariat in February 2010 the tracking sheet was finalised in March of that year. The relevant Secretariat desk officers were to have responsibility for filling in this tracking sheet to provide the STRP with additional context for the questionnaire information, in the form of their own summary comments about the status of that information (completeness, verification, etc), the status of the case, the main issues at stake in considering removal from the Record, and a Secretariat recommendation.
- 7.34 The relative dormancy of the Montreux Record in more recent years (see below) means that it is not yet possible to know whether use of this tracking sheet will reduce the previously-experienced need for multiple time-consuming exchanges with the originating Party, seeking sufficient information to form the basis for the STRP's advice. In the course of future proposed removals this should be kept under review.
- 7.35 The question of on-the-ground verification/assessment should also be kept under review. In cases where Montreux Record removal is proposed following a Ramsar Advisory Mission, the Mission report (assuming it addresses the same issue that led to Montreux Record listing) should be adequate for this purpose. In other cases, specific measures to assess the basis for removal might be pursued, potentially as part of the spectrum of "advisory services" discussed in section 8 below, including the option of a "mini-mission" where appropriate (and subject to funding).
- 7.36 Parties may wish to append commentaries from other independent sources when submitting their "part 2" questionnaires. The removal procedures in Res. VI.1, in referring to requests from the STRP for further information, also provide that the Secretariat itself "may also request information from other sources".
- 7.37 All such validation and verification, and acting on the advice of Missions or the STRP, is ultimately a voluntary matter, since addition or removal of sites on the Montreux Record is entirely at the discretion of the Contracting Party concerned. Having demonstrated positive commitment by voluntarily listing a site on the Record in the first place, however, it would be consistent with such a commitment for the Party only to remove it when all authoritative advice, particularly that of the STRP, indicates that doing so would be a prudent and well-founded step to take.
- 7.38 Finally, cases of removal from the Montreux Record, provided they have followed best advice as discussed above, and provided they do not come about mainly as "abandonment" of "hopelessly irrecoverable" cases, might constitute success stories worth disseminating, or at least sources of useful lesson-learning for wider benefit. Thought could usefully be given to ways of optimising the Record's potential in this respect.

Interaction with analogous processes of other MEAs

- 7.39 A number of other MEAs and international processes operate procedures for giving attention to conservation issues arising from time to time on important

sites. Ramsar Convention interactions with these are mainly discussed in section 8 on the Ramsar Advisory Missions process below, since in most cases these other procedures focus on advisory or enforcement interventions rather than the maintenance of an international list of cases *per se*, and hence have more in common with the Mission process.

- 7.40 In the case of the World Heritage Convention, however, (where the interaction with Ramsar can concern wetland sites with both Ramsar and World Heritage designations⁶⁷), the “List of World Heritage in Danger” is a more direct analogue of the Montreux Record, and hence is discussed here⁶⁸.
- 7.41 Where a site is designated under both the Ramsar and World Heritage Conventions (assuming this is on a basis of shared recognition of at least some of the same aspects of value⁶⁹), it could in principle be anomalous for it to be listed on the Montreux Record without also being included in the List of World Heritage in Danger, and *vice-versa*. To the extent that the same values are the basis for both designations, any threats to those values should in principle be of equal concern to both Conventions.
- 7.42 Whether this is in fact true depends on how similar the stated rationales or criteria for inclusion in each list are to each other. The Ramsar rationale has been discussed above. For World Heritage, the Convention text (Article 11) provides for Heritage in Danger listing for properties (= sites) “threatened by serious and specific dangers”⁷⁰, “for the conservation of which major operations are necessary and for which assistance has been requested”. Expanded criteria have been defined by the World Heritage Committee⁷¹.
- 7.43 These expanded criteria cover both “ascertained danger” and “potential danger”, hence mirroring the Ramsar system’s coverage of actual and “likely” change in ecological character; although “likely” may be a more exacting test to meet than “potential”, and hence the World Heritage approach may be more liberal in this respect. The World Heritage criteria, however, use terms such as “major”, “serious decline”, “severe deterioration”, “threatening integrity” and “deleterious effects on inherent characteristics”, making the Ramsar approach potentially more liberal in this respect. On the other hand, the World Heritage criteria include non-anthropogenic changes, so in this respect they represent a more liberal approach.
- 7.44 Generally speaking, harmonisation of processes of this kind helps to avoid divisive attack from opposing interests, and taking a joint approach to instances of mutual concern helps to avoid duplication of effort. Based on the criteria above however, sometimes there might be reasons why a threatened wetland site with both Ramsar and World Heritage designations is only listed on the Montreux Record or the List of World Heritage in Danger and is not listed on both. Depending on the circumstances, as illustrated above, it may

⁶⁷ See Pritchard (2013).

⁶⁸ Although an NGO example rather than an MEA one, BirdLife International’s “Important Bird Areas in Danger” is also relevant, as mentioned in section 5 above.

⁶⁹ As opposed, for example, to a World Heritage property designated under that Convention’s cultural criteria, where the site happens to overlap spatially with a Ramsar site but where wetland ecological importance forms no part of the basis for its World Heritage status.

⁷⁰ Examples of such dangers are given in the Article.

⁷¹ Published in the Operational Guidelines for the Implementation of the World Heritage Convention (World Heritage Committee; latest version 2013).

be either the Ramsar system or the World Heritage system which takes the more restrictive approach.

- 7.45 Although there may therefore be justifiable cases where a site with both designations is included on only one of the “special attention” lists, for any site which is included on both lists it would perhaps be more surprising for there to be any difference in the decision as to eventual removal. This has nevertheless happened in the case of at least two Ramsar sites which were removed from the List of World Heritage in Danger while remaining on the Montreux Record⁷². It will be important to manage very carefully the public presentation of the reasoning behind any such situations.
- 7.46 By contrast to the inclusion criteria mentioned above, where removal from the lists is concerned, the World Heritage guidance says less than the equivalent Ramsar guidance, referring only to the property being “no longer under threat”, and to “all efforts [having been] made to restore the site's values”. This therefore gives no indication of a basis for a difference between the two lists in their rationales for removal.
- 7.47 There is a procedural difference, however, in that both addition and removal decisions in the Ramsar context rest with the Contracting Party concerned, while in the World Heritage context they rest instead with the World Heritage Committee. Apart from anything else this might make for a difference in timing, given that decisions in the World Heritage context would need to wait for a meeting of the Committee.
- 7.48 There are therefore some valid reasons why there may be some enduring asymmetry between these two systems; but in principle all efforts should be made to operate them in as harmonised a way as possible.

Negative perceptions of the Record, and under-use

- 7.49 There are cases where Contracting Parties have warmly embraced Montreux Record listing as a valuable tool for problem-solving and assistance, and have publicly promoted their positive experiences of its use⁷³. In Resolution VIII.8 (2002) the Parties collectively re-emphasised the several potential benefits of the process (including potential funding-related benefits), as mentioned above.
- 7.50 Central to the procedure is the stipulation that a site can only be listed on the Record with the approval of the Contracting Party concerned. This was designed to allay fears of its use as an “enforcement” sanction, and the Convention stopped short of adopting a system which could be used against Parties’ will and produce a finding of non-compliance. (As mentioned above, listing is not based on alleged breaches of the Convention, but on events which might be expected to arise from time to time in the normal course of discretionary decision-making, and for which the Convention is designed to provide one source of responses). There is clearly a trade-off in this, between the risk of some deserving cases being blocked by unwilling Parties and the risk of losing whatever support remains for the procedure as a whole.

⁷² Ichkeul (Tunisia) and the Everglades (USA).

⁷³ See for example the case of Nariva Swamp, listed on the Record by Trinidad & Tobago soon after that country joined the Convention; and documented as a case study in Pritchard (1997).

- 7.51 Any careful balances of this kind, however, have in practice been eclipsed by a tendency in many places to perceive the Record as a form of vilification or "blacklisting" of "guilty" countries, and hence a reluctance by some Parties to avail themselves of the voluntary option to add sites to it. This is despite the fact that many of the same countries are Parties to other international processes (such as the World Heritage Convention) where prominent attention is drawn to sites facing threat by means of a decision of an international body rather than the Party itself, and where ostensibly negative language such as "sites in danger" is used with impunity.
- 7.52 The seeds of the problem in the Montreux Record's case were sown at COP4 when it was first established. Although drawn from information provided by Parties in their National Reports to the COP, the initial list of sites for inclusion was compiled by the Secretariat. A number of the Parties concerned felt that they had not been sufficiently consulted about it and refused to have their sites listed⁷⁴. In adopting Recommendation 4.8 the COP did not quite solve the problem by providing only that the Record should be maintained (by the Secretariat) "in consultation with" the Parties concerned; and it was not until the following COP that they specified (in Resolution 5.4) that listing had to be with the Party's explicit *agreement*.
- 7.53 The Record currently includes only around 50 sites, some of which have remained there since the 1990s with no apparent action being taken. A mere three sites have been added since 2005⁷⁵. It is clear from successive National Reports to COPs and other sources that many more deserving cases exist (and that actions in response to change in ecological character have often proceeded without the sites concerned being listed on the Montreux Record).
- 7.54 Hence even with the eventual move to an understanding that the Record was only intending to encompass a sub-set of Article 3.2 cases and not the whole span of such cases (see earlier discussion above), it has failed even to cover this sub-set adequately. This is undoubtedly because of the negative perceptions just described, as well as perhaps a perceived redundancy (see below)⁷⁶.

The future of the Record

- 7.55 It has been observed on more than one occasion, for example at COP10 in 2008⁷⁷, that if Article 3.2 of the Convention were operating fully as intended⁷⁸, there might be little need for the Montreux Record, since a record of "Article 3.2 reports" could largely fulfil the purposes for which the Montreux Record was designed.
- 7.56 The efforts made at COP8 to breathe new life into the process⁷⁹, by re-emphasising that the Montreux Record could be used for specially targeted

⁷⁴ Account based on Jones (2013).

⁷⁵ Figures from Jones, op cit.

⁷⁶ Although this conclusion seems robust enough (based on the evidence available and on informal dialogues over many years), Party opinion on these specific questions has never been globally surveyed in a systematic and formal way.

⁷⁷ See COP10 document Doc. 27.

⁷⁸ It is of course not yet fully doing so, as discussed in section 4 above.

⁷⁹ In Resolution VIII.8, supported by COP8 document Doc. 20.

positive purposes in respect of a sub-set of Art. 3.2 cases, largely failed to make any difference to its image problem and the problems of its under-use.

- 7.57 The Montreux Record is a voluntary mechanism which may be adding little value (some may argue it is even counterproductive) and yet when it is used, it creates a certain administrative overhead. Article 3.2 reporting, by contrast, is a binding obligation on all Contracting Parties, and is defined in the Convention text itself. If there is underperformance in both, and overlap and redundancy between the two, it would seem logical to put more effort into maintaining and improving the mandatory and universal Article 3.2 process than continuing with the Montreux Record.
- 7.58 Under the Convention as it stands, the Secretariat has already inevitably had to accumulate a *de facto* record of Article 3.2 reports, so this exists in any event, whatever may be decided in relation to the Montreux Record.
- 7.59 An improved Article 3.2 process would entail better reporting of ecological character change/likely change, and maintenance of a fuller and more up-to-date record of such reports⁸⁰. Such a record could be used to trigger relevant Ramsar advice and assistance mechanisms⁸¹ in just the same way as (or more effectively than) the Montreux Record has done (these things can currently proceed in any case without needing the site to be Montreux Record listed). An explicit process could usefully be added for removing sites from the Article 3.2 record when the issue prompting the initial report has been resolved.
- 7.60 Although, based on the reasoning above, some have suggested abolition of the Record, others consider that it still may be useful. There might be cases, for example, where listing a site on the Record adds value as a formalised statement of Contracting Party commitment to address the needs of the site, which may assist in dialogues with potential funders for the development and implementation of relevant conservation measures. The Montreux Record could in effect be an important prioritisation tool for fundraising by the Secretariat and others (provided this is coordinated fully with budgeting and fundraising for Advisory Missions, as discussed in section 8).
- 7.61 The Ramsar Administrative Authority for a Party, being most often a Ministry in the Government, may see value in Montreux Record listing as a way of ensuring that a course of action to which it commits at a given point in time will remain as an “open file”, for international visibility and engagement of support, for as long as necessary to resolve (and thereafter to monitor) the issues concerned. This may be important in situations where levels of national engagement are prone to fluctuation or are dominated by short-term planning.
- 7.62 Administrative Authorities (AAs) may be Ministries or agencies of government responsible for conservation or environmental affairs, competing for resources or political profile with other parts of government such as those responsible for finance or infrastructure development. The AA may find Montreux Record listing valuable in such national contexts, as an

⁸⁰ In principle it would be logical for a “full record” to include also any (rare) cases of change occurring in the circumstances defined by Article 2.5 and Res. IX.6, as well as those (more commonly) defined by Art. 3.2.

⁸¹ Including Small Grant Fund projects, Ramsar Advisory Missions and other forms of advisory support as discussed in section 8.

internationally recognised statement of the priority to be given to action to address change in any of its Ramsar sites.

- 7.63 A purely pragmatic reason for retaining the Record could be that letting it continue in a more or less dormant state might amount to an easier option (“no action”) than the small administrative and political steps required to abolish it. On this basis it would not be actively promoted, but it would remain as a tool for Parties to use if they occasionally see value in doing so.

8. The Ramsar Advisory Missions process

- 8.1 The Ramsar Advisory Missions process was created by a decision of the Standing Committee in 1988, which was later endorsed by the COP in 1990 in Recommendation 4.7. The system was originally named the “Monitoring Procedure”, then later the “Management Guidance Procedure”, and finally the “Ramsar Advisory Missions” (RAM).
- 8.2 Over 70 RAMs have been completed to date. As well as advisory interactions in the countries concerned, each Mission produces a report, which (as determined by Recommendation 4.7) is publicly available on the Ramsar website. The process is described Annex E below.
- 8.3 The RAM process is a powerful asset for the Convention: it assists implementation, reinforces standards and credibility, raises awareness and generates lessons learned. Among some Parties at least, it is viewed as a highly positive support tool, and as one of the benefits of being a Ramsar Party.
- 8.4 Individual Missions have tended to be very efficient and cost-effective. As a relatively infrequently-used mechanism, once activated, RAMs become a tangible and visible focus for Ramsar-related issues in a country. Although the primary reason for a given Mission may be quite a specific question relating to one Ramsar site, often it will be an occasion for an integrated consideration of the national policy context and implementation of the Convention more generally, and an opportunity for profile-raising on wetland issues, with strategic and long-term benefits.
- 8.5 Despite these advantages, the number of Missions completed in the 25 years of their existence is small. Their application has also been uneven, with particularly low numbers for example (relative to the number of Parties) in the Asian region⁸². Requests for Missions can also sometimes take a long time to come to fruition.
- 8.6 Issues concerning the effectiveness of the process have been reviewed on several occasions by the STRP, the Standing Committee and by two of Ramsar’s International Organisation Partners⁸³. The present chapter draws on these reviews, as well as the author’s direct experience of participation in seven individual Missions.
- 8.7 Overall the process is not fulfilling its full potential, and there is a strong case for examining ways in which it might be revitalised and strengthened. No formal guidance has been adopted by the COP since the original brief parameters set out in 1990 in the annex to Recommendation 4.7, which still govern it today; and this too might usefully be re-examined.

The scope of the process

- 8.8 The trigger for initiating the process is defined by Recommendation 4.7 in terms which echo those of Article 3.2 of the Convention, namely cases of

⁸² Data derived from the Ramsar website http://www.ramsar.org/cda/en/ramsar-documents-rams/main/ramsar/1-31-112_4000_0__ - also summarised in Jones (2013).

⁸³ See Pritchard (2000b) and Jones (2013).

actual or likely human-induced adverse change in ecological character of a listed Ramsar site. This defines the trigger, but it does not define a limit to the scope of the process. In other words an Article 3.2 situation must be present as the basis for launching a RAM, but once launched, while obviously the Mission should address the Article 3.2 situation concerned, it is not prevented from addressing other associated issues as well. Indeed, as mentioned above, the opportunity to do so has proved to be one of its benefits.

- 8.9 Notwithstanding the potential breadth of scope which a Mission can address once it is launched, some consultees in the present review have suggested that the initial grounds for launching may be too restrictively defined. If there is uncertainty for example about whether an ecological character change at a Ramsar site is human-induced or not, it could be perverse for this to make the case ineligible for a Mission. If advice on positive management issues (as well as negative impacts) would be best obtained by this method, this too should perhaps be allowed as a trigger. If ecological character change is casting doubt on whether a potentially qualifying Ramsar site should be designated or not, it might be perverse to make this ineligible for advice from a Mission on the grounds that the site is not yet listed.
- 8.10 Missions for wetland/Ramsar implementation issues which are not related to sites that are (or may become) Ramsar sites could also be contemplated; although widening the scope this far might risk losing some of the force of the focus on the Ramsar sites list. Rather than not being offered at all, forms of advice and intervention on these wider issues could perhaps most usefully be framed under other processes, rather than under the specific Ramsar Advisory Missions process. This question may however be worth discussing further.
- 8.11 Advisory Missions are one of the response options available for sites listed on the Montreux Record (see section 7 above). Recommendation 4.8 which established the Record instructed that the RAM process should give priority to Montreux Record sites, and many have indeed related to such sites. Ramsar Strategic Plans⁸⁴ have gone further and have sought the activation of a RAM for every site listed in the Record. Given the discussion in section 7 about the Record however, emphasis on this linkage is now less appropriate, and it should no longer be a factor in prioritising RAMs. (Formally this will require a repeal of the relevant clause in Rec. 4.8).
- 8.12 Inherent to the scope of the process is the provision for its final outcomes to be made public, through reports published on the Ramsar website (discussed further below). Consultees agree that this critically contributes to the strength of the mechanism, and it is a provision that must be retained.

Initiating a Mission

- 8.13 The RAM process is triggered by the Ramsar Secretariat becoming aware (by any means, since this is not specified) of a relevant case of ecological character change or potential change. The Secretariat can then propose to the Contracting Party concerned that a Mission be undertaken. Hence the initial prompt can come from any quarter, and it does not depend on the Contracting Party making the first move.

⁸⁴ This refers to the second and third Plans, for 2003–2008 and 2009–2015 respectively.

- 8.14 Although not specified in Rec. 4.7, the formal practice has been that Missions are undertaken at the invitation of the Contracting Party concerned. If the Party is resistant to the idea, the Secretariat is empowered to continue seeking information and providing advice, and the Standing Committee also “may pursue the matter, in direct contact with the Contracting Party or Parties concerned and, where appropriate, with other responsible agencies or bodies, with a view to helping to find a solution”.
- 8.15 These latter provisions are fairly loosely drawn. There would be little to be gained in such an “advisory” context by contemplating interventions against the will of the Party; but especially where any reluctance on their part might simply be a symptom of uncertainty or concerns based on misconceptions (e.g. about costs), there could be a case for using these provisions on some occasions in a more proactive way.
- 8.16 This might be supported by more systematic consideration of where potentially deserving cases exist, based on existing regular processes for reviewing the status of Ramsar sites in general⁸⁵. (Again in practice this should extend, where appropriate, to candidate sites for listing).

Analogous systems in other MEAs

- 8.17 A number of other MEAs and international processes operate procedures for giving attention to conservation issues arising from time to time on important sites. These include the Bern Convention’s “case file” system, the African-Eurasian Waterbird Agreement’s “Implementation Review Process”, the World Heritage Convention’s “List of World Heritage in Danger”, the Council of Europe’s “Diploma of Protected Areas”⁸⁶ and the European Union’s legal enforcement processes for protection of “Natura 2000” sites.
- 8.18 A central consideration in all these systems is the delicate political balance between incentive or assistance on the one hand, and assurance of compliance or enforcement on the other. The different régimes show a range of ways in which this balance is struck.
- 8.19 In this, a key point is whether the consent of the country concerned is required before the relevant procedure can be progressed, or whether it is progressed by decision of the majority or by a supervisory body to whom this responsibility is entrusted (e.g. a Convention secretariat or committee), in the context of a shared international interest in the outcome.
- 8.20 For an enforcement procedure to be effective, some kind of meaningful sanction must at least in principle be available. For an incentive/assistance procedure to be effective, it must be capable of meeting the need of the country concerned, for example by offering the right expertise within a sufficiently short timescale to solve urgent problems. The systems with the most effective incentives are those which can draw on funds dedicated to the purpose.

⁸⁵ This includes the standing agenda items at every meeting of the COP (see most recently Resolution IX.15, 2012) and Standing Committee (since 2007, further to Decision SC35-28). See also section 4 above.

⁸⁶ The Diploma is relevant to the present discussion because it is awarded for a limited period, and can be renewed or withdrawn subject to a system of review and assessment. It has thus been able to function as an instrument for responding to threats and other problems at sites, where the high-profile decision as to renewal of the Diploma may be a key spur to securing resolution of the problem.

- 8.21 An example is the World Heritage Convention, where the establishment of a List of World Heritage in Danger was provided for at the outset, in the Convention text (1972). Sites are entered on this list either where assistance is requested, or where the World Heritage Committee itself decides there is an "urgent need". Assistance can be provided in the form of advisory missions. Detailed eligibility guidelines have been adopted.
- 8.22 A key purpose of adding a site to the World Heritage in Danger list can be to help in securing financial assistance from the World Heritage Fund (although funding from this source is not limited to sites in danger). The provision in the Convention which affords States Parties rights of consultation is couched in terms of a possible decision to refuse addition of a site to the List, rather than to add it. This indicates the "incentive" nature of the mechanism, meaning that although in some cases listing might be viewed by a government as an adverse reflection upon their actions, more often governments are motivated to seek to apply the mechanism, and the role of supervisory bodies is to weigh up the deservingness or otherwise of the given case for assistance.
- 8.23 With any of these systems there may be scope, and every effort should be made, to help governments ultimately present the solutions that are arrived at as examples of pioneering field-leadership, so they can reap political kudos at home and on the international stage. This in itself is a form of incentive.
- 8.24 In countries covered by more than one of the processes mentioned, governments and others potentially have a choice as to which system might be best in a given case. Enhancing awareness about the respective attributes of each should help in making wise choices on this. At the same time, these systems are not mutually exclusive, and it is conceivable in appropriate cases for several or all of them to be operated in parallel. This happens already in the case of joint missions (see below).
- 8.25 It is also conceivable for them sometimes to operate in a complementary manner. For example, it has been known for a Bern Convention "case file" to be a decisive influence in bringing about a European Court of Justice action on the case in question, producing an outcome which the Bern Convention could not have produced on its own, but which the European Union system may not have been sufficiently stimulated to reach otherwise.
- 8.26 No comparative evaluation of the effectiveness or rates of success of these different procedures in solving or averting harm to ecological interests appears to have been conducted. This would be a challenging question, but one worth investigating nevertheless, especially if it can be related to design features which Ramsar might seek to emulate or reinforce in the RAM process. In the meantime the issue of resourcing is one such feature on which further comments are made below.

Joint Missions

- 8.27 Many Ramsar sites are covered by designations under other instruments as well as Ramsar, including those operated by some of the MEAs mentioned above⁸⁷. Especially where such instruments also provide for an advice or monitoring process, it may often make sense (if the issue concerned has

⁸⁷ See for example Pritchard (2013) for a review of the overlaps between Ramsar sites, World Heritage sites and Biosphere Reserves.

mutual relevance) to arrange any missions or equivalent interventions on a joint basis.

- 8.28 This has occurred on at least seven occasions where a RAM has taken place, involving at different times (in addition to Ramsar) the World Heritage Convention, the Convention on Migratory Species and the African-Eurasian Waterbird Agreement. (Clearly there are no additional site designations involved in the case of these latter two, but in the instances concerned there were mutual interests in respect of wetland species and habitats).
- 8.29 The joint operation of these particular Missions appears to have been a very positive experience, and this approach is generally to be encouraged. Broader inputs are secured, the process has broader political resonance, and the outcomes have broader impact. Complementary strengths of the different instruments can be deployed according to need.
- 8.30 There is, however, a risk that the extra complexity of necessarily more multi-layered decision-making and coordination could cause extra delay in activating a Mission. There has, moreover, been no standard approach to considering whether a given RAM should be undertaken jointly with another process: this has largely been addressed in an opportunistic way, and it has differed from case to case. It is likely that some "Ramsar only" Missions could usefully have been undertaken on a joint basis if this option had been considered. Opportunities may therefore be being missed.
- 8.31 All of this argues for some more explicit attention to the methods by which, and the circumstances in which, joint Missions might best be arranged in future. Building on the best of current practices, some form of jointly-agreed procedural guidance for the respective bodies' Secretariats on this could be a useful step. More routine/automatic prompting of the "joint approach" question, when a RAM or other MEA's equivalent is under consideration in any of the relevant fora, would also help⁸⁸.

Resourcing

- 8.32 Funding for Ramsar Advisory Missions was initially allocated in the core Convention budget approved by COP, rising from an allocation of CHF 30,000 per year in 1991-93 to CHF 80,000 per year (8% of the total) in 1994-96. Thereafter, however, not for any reason of the system's underperformance (if anything, quite the reverse), subsequent budgets have failed to make any allocation of core funding for RAMs.
- 8.33 At various meetings in this period, Parties have reported positive experiences of RAMs and called for better funding of the process. The relatively low level of use of RAMs in the Asian region, mentioned earlier above, has informally been attributed by some to the lack of available funding. At COP11 in 2012 it was noted that resourcing for RAMs was a "pressing issue" and there was an appeal from the Secretary General for resources to be made available. Even then, no core allocation was made.

⁸⁸ As a recent example, Decision 38 COM 7B.79 of the 38th meeting of the World Heritage Committee (Doha, Qatar, June 2014) requests the government of Spain to invite a World Heritage "reactive mission" to assess conservation status and threats to the Doñana National Park World Heritage site and Ramsar site, "including an invitation to the Secretariat of the Ramsar Convention".

- 8.34 RAMs did make an appearance in the budget approved by COP11 for the 2013-2015 triennium, for the first time since 2002: but only as a "non-core" item, meaning they would continue to rely totally on voluntary financial contributions⁸⁹.
- 8.35 Voluntary contributions were expected from the start (as a "substantial augmentation" of the budget allocation, according to the COP4 budget Resolution⁹⁰). There were some who assumed that enthusiasm for RAMs would readily produce the requisite funds in this way. At the start this seemed to be borne out, with over CHF 50,000 per year being contributed in 1991-1992. Subsequently, however, the picture has not justified such optimism. The zero allocation (or absence of any reference at all) in core budgets may have acted to depress interest in making additional contributions. The way in which the RAM process has been linked with the Montreux Record, and the sometimes negative image of the latter (see section 7 above) is also said by some to have been a factor.
- 8.36 A significant gesture of faith has been made by NGOs, who have made their own voluntary financial contributions to the RAM budget, including Australian NGOs in 1996 and the Royal Society for the Protection of Birds (BirdLife International in the UK) which made major payments regularly over many years.
- 8.37 Despite special appeals made at COP11, no additional voluntary contributions had been received in response by the time of the Standing Committee's 47th meeting in March 2014. At this meeting the Committee had to decide on the disbursement of a budget surplus of CHF 366,000, and it allocated CHF 50,000 of this to RAMs (for the year 2014-15).
- 8.38 There is a strong case now for re-instating the funding of Ramsar Advisory Missions from the Convention's core budget. The consolidated picture of ecological character change issues presented by the present review may assist in reassuring Contracting Parties about the value which such funding would represent. Adoption of other recommendations made here, such as "de-coupling" of RAMs from the Montreux Record, may also assist.
- 8.39 Ramsar's International Organisation Partner WWF has emphasised the unfairness (in the current unbudgeted situation) of RAMs currently being more available to developed countries (who can fund them from their own resources) than to developing countries, who can not. WWF has recommended that COP12 in 2015 should agree a permanent core budget allocation of the order of CHF 200,000 (upon agreement of which they would augment it with their own voluntary contribution).
- 8.40 Even with such a move, other additional funding sources are still likely to be needed. Creative thinking from the Secretariat's newly-formed Strategy and Partnerships Department will hopefully be directed to this end. Regional imbalances may need to be countered by defining allocations in advance on a fairly-divided regional basis, for at least part of the available funds. The practical, time-limited, solution-oriented nature of the RAM process could make it an attractive prospect for an organised appeal to the wider donor

⁸⁹ The figure specified, merely as an aspiration, was CHF 150,000 per year (Resolution XI.2, Annex).

⁹⁰ Resolution on financial and budgetary matters - Annex to DOC. C.4.13 Rev. (NB Resolution numbering conventions altered after this COP).

community; perhaps by setting up a dedicated fund with provision for oversight by a major donors group.

Coordination and team composition

- 8.41 The Ramsar Secretariat's role in the initiation of RAMs is defined in the original 1990 COP decision, as discussed above. It is logical for the Secretariat to play a central part in defining the terms of reference for each individual Mission, and in ensuring that relevant independent expertise is drawn upon and appropriate administrative arrangements are made. It should also be responsible for liaising as necessary with the Standing Committee and the COP, for quality assurance of RAM reports and for maintaining a RAMs area of the Ramsar website.
- 8.42 Normal practice has also been for a Secretariat staff member to coordinate the organisation of each Mission, to participate in person in the visit to the country concerned and to author or co-author the resulting report. Some Missions have consisted solely of a visit and report by a member of the Secretariat, which can be a cost-effective option when the opportunity is taken to associate it with already-planned travel to the area on other business, and when the individual concerned has all of the expertise required for the issues at stake.
- 8.43 Assuming these levels of involvement in every case, however, presents a significant capacity limitation on the number of RAMs that can be accomplished, and on their timing (for example avoiding times of intense Secretariat activity in the run-up to a COP).
- 8.44 The Contracting Party in whose territory the site(s) is/are located (or more than one, if trans-boundary issues are involved) formally hosts the Mission, and would normally coordinate logistical arrangements in conjunction with the Secretariat. Many have done this in an exemplary way, developing RAMs into opportunities for public and political profile-raising and strategic thinking about Convention implementation in general, as well as full exploration of the issues that prompted the Mission, through extensive field visits, "commission of enquiry"-style testing of evidence and broad engagement of stakeholders.
- 8.45 Clearly, however, not all Parties will be in a position to deliver this level of approach, or at least not without considerable external support. In some cases Parties may be uncertain about taking the initiative on various aspects of the process, or about taking "ownership" of it as a whole. Ways of supporting them to do so, so that it is not unduly assumed that the drive will always come from the Secretariat, are worth exploring. In the African region for example, the idea of an initial "desk study" by the Party (to take charge of setting out the background and helping to frame the RAM) is currently being tested by the Secretariat.
- 8.46 Missions offer a way for Ramsar to draw upon its wide global network of collaborating organisations and individuals to identify and deploy exactly the right type of specific expertise to assist a Contracting Party with a specific problem. Mission teams therefore often include representatives of partner organisations and trusted consultants. Team coordination and report-writing is often an appropriate role for such consultants, where it can be framed in contractual terms with deadlines.

- 8.47 Commissioning expert advice and assistance of this kind is one part of the resourcing needs of the RAM system. Pioneering interpretation issues of global significance and/or the general reputation of the Convention may be at stake, and over-zealous cost-avoidance on this front may prove in the long term to be a false economy⁹¹. The aim should be to deploy the best person for the job.
- 8.48 The Convention is well-connected, and an *ad hoc* approach to this is probably often adequate; but consideration might usefully be given to developing a more systematic roster of available experts, with some summary supporting information, so that options can be reviewed in a structured way on each occasion, and targeted calls can be issued rapidly in urgent cases.
- 8.49 In addition to bringing global expertise to bear, Missions should also ensure that local and in-country knowledge is fully drawn upon. This will include adequate consultation of stakeholders and experts, but it will also usefully involve inclusion of a relevant expert or experts in the Mission team itself. As well as obviously being important for the quality of the team's work, this will have benefits in terms of the legacy and follow-through of the Mission's impact, since an investment will have been made in "embedding" the process in the national context. In developing countries, the use of external funding for this could be a very effective form of assistance.
- 8.50 The STRP is a key part of the Convention's network of expertise. Its role in the RAM process has been discussed in some depth on various occasions, particularly during the 2006-08 triennium. Any new guidance or redefinition of the parameters of the Missions process should make reference to the role of the Panel, both in respect of advice in individual cases (potentially including provision of experts for the Mission team) and in terms of strategic considerations for example on priorities, scoping of terms of reference, and analysis of lessons learned. This should probably also be reflected in the *modus operandi* of the Panel (the current version of which makes no reference to Advisory Missions⁹²).

Following up Mission recommendations

- 8.51 RAM reports should conclude with implementable recommendations which address the issue that originally prompted the Mission. They may also address any other matter that the Mission has helped to illuminate. These recommendations are an important distillation of the considerable investment that may have been made in selecting the issue at stake for special attention and arranging in-depth examination of it. They can often be the most important part of the whole process.
- 8.52 Recommendation 4.7 specifies in general terms that the Secretariat "shall periodically review and report progress on the conservation status of sites to which its attention has been drawn under [the RAM] procedure. To facilitate follow-up, the Bureau shall maintain a register of activities undertaken in this connection". Otherwise this issue of follow-up tends in practice to receive no systematic attention. The approach taken varies from case to case (including

⁹¹ In making this point the author, as one such consultant, is obliged to declare an interest. The point is made however from as neutral and objective a standpoint as possible, setting this interest aside.

⁹² *Modus operandi* of the Scientific & Technical Review Panel 2013-2015. Adopted by Resolution IX.11, as refined by Resolution X.9, and adjusted in line with Resolution XI.18.

cases that effectively go no further than publication of the report), and there is no regularly-updated overview of the status of implementation of RAM recommendations.

- 8.53 The second Ramsar Strategic Plan (2003–2008) included as action 11.2.6: “Where a Ramsar Advisory Mission has been completed for a Montreux Record site, take all necessary steps to implement the recommendations, and report at regular intervals to the [Secretariat] on the results of these actions”. The current Plan (2009-2015) however makes no reference to this aspect.
- 8.54 There appears to be a gap here, and it would be useful to develop a simple but systematic approach to following up RAM recommendations (and providing follow-up advice and support if required).
- 8.55 Part of this clearly involves a responsibility for the Ramsar Secretariat; but it also involves a responsibility on the part of the Contracting Party, when accepting a final RAM report, to make clear its intentions and the nature of the commitments it voluntarily accepts to implement the recommendations that have been made. It would be a useful standard practice for the Party to issue an *immediate response* of this kind, on receiving the final Mission report.
- 8.56 Properly documented implementation of recommendations provides a basis for a further dimension of follow-up which should also be considered, namely some form of post-Mission evaluation to review whether it went as planned, and what lessons (positive and negative) were learned that could benefit the planning of future Missions. Some basic “checklist”-style guidance could perhaps be developed for this.

Making better use of RAM reports

- 8.57 The value of RAM reports and the importance of their non-confidential status has been mentioned above. This value is almost certainly being under-utilised. As an archive of over 70 hard-won, diligently documented and formally endorsed “front line” learning episodes, the reports are a rich source of problem-solving case experience for the Convention as a whole. There is, however, no organised way of giving them attention in this sense, other than making them publicly accessible on the Ramsar website.
- 8.58 One simple future step could be to undertake a one-off review of all the existing reports, in order to distil key messages and lessons learned according to selected themes, and to compile these in an overview report. A attractively-packaged compilation of case experiences could be a useful tool for promoting the mechanism. More sophisticated options could involve a system of regularly updated thematic abstracts, key-word indexing and similar measures.
- 8.59 Any of these measures would also find a wider audience if resources could be found to undertake translations of the material into more languages, starting perhaps simply with translated executive summaries of the reports.

A spectrum of response options

- 8.60 Although variable in scale and to some extent in form, Ramsar Advisory Missions represent just one particular model of official Convention support for

Parties with sites facing ecological change. Other advice of various other kinds is provided on such issues on an almost daily basis by Secretariat staff, International Organisation Partners and others, but the RAM is the only option that is framed by a procedure that makes clear what the parameters are and what expectations are justified, and the only one providing a proper vehicle for mobilising additional help (whether resources or expertise).

- 8.61 It would be beneficial in future to situate the RAM process on a spectrum of response options that ranges from full-scale, high-level team-based field visits, in-depth consultations and analysis on the one hand, to informal “question & answer” channels and “help desk” capabilities on the other. Somewhere in the middle ground, a model for “mini-missions” could be developed, for situations where a full-blown RAM may not be appropriate but a streamlined version would be. Roles and responsibilities across the spectrum, for example for the STRP and its National Focal Points, could usefully be clarified.
- 8.62 A particularly important type of option to provide for in this way would be responses that can be activated more or less immediately, for urgent cases where major decisions are imminent or where ecological conditions are changing from day to day. Such a process for “rapid response consultations” or similar would need to be set up in advance, with decision-making protocols made clear to all concerned.
- 8.63 Based largely on enhancements of existing activities, it would therefore be conceivable in future to expand the one systematic tool of Ramsar Advisory Missions into a broader systematic Ramsar (sites) Advisory *Service*, with a spectrum of response options to choose from, according to the circumstances.

Annex A

Summary definition of STRP work programme tasks on change in ecological character, 2013-2015 triennium

Sub-task A: Describing ecological character

- Prepare advice on use and further development of conceptual models for describing ecological character, in the context of completing ecological character description (ECD) sheet adopted by COP10 and ECD components of the RIS – 2012 revision

Sub-task B: Monitoring for change in ecological character

- Prepare advice that consolidates terminology on how monitoring for change in ecological character is expressed and improve procedures and guidance relating to:
 - the determination of appropriate reference conditions for assessing change in ecological character, (2013-15/41); approaches to establishing the range of natural variability of wetland sites (2013-15/20 and 2013-15/41).
 - defining Limits of Acceptable Change (2013-15/20); determining specified limits of change, (2013-15/41); identification of thresholds of change in ecological character; (2013-15/25 and 2013-15/41)
 - the need for and scope of guidance on determining confidence limits and degree of likelihood in cases of “likely” change in the context of Article 3.2; (2013-15/20);
 - monitoring indicators. (2013-15/25) – lower priority to above and should be dropped because Panel believes this is a management plan.

Sub-task C: Reporting change in ecological character

- Review, update and rationalize guidance on issues relating to Article 3.2 of the Convention (2013-15/20):
 - the role and operation of the Montreux Record; (2013-15/20)
 - set up criteria for, and streamline the procedure for, reporting cases of human-induced negative changes in the ecological character of a Ramsar Site under Article 3.2; (2013-15/20)
 - prepare advice on strategies for dealing with the emergence of novel or hybrid ecosystems, and shifting baselines as a consequence of climate change, for reporting changes in ecological character (2013-15/41).

Sub-task D: Responding to change in ecological character

- Prepare advice on the need for and scope of guidance on the application of a precautionary approach in the Ramsar Convention; (2013-15/20).

Annex B

Article 3.2: Key aspects of existing guidance and interpretations

- B.1 Article 3.2 of the Convention states that “each Contracting Party shall arrange to be informed at the earliest possible time if the ecological character of any wetland in its territory and included in the List has changed, is changing or is likely to change as the result of technological developments, pollution or other human interference. Information on such changes shall be passed without delay to the organization or government responsible for the continuing bureau duties specified in Article 8 [i.e. the Ramsar Secretariat]”.
- B.2 By contrast to some other provisions in the Convention, Art. 3.2 is a strict and unqualified requirement. A key part of its force is that it envisages a “real time” or “as it happens” communication system, so that responses to specific issues can be prompt and effective. The concept is one of an action tool, rather than merely a documentation tool. The phrase “without delay” is critical to this (and yet it has unfortunately tended to be extremely poorly observed by most Parties).
- B.3 Article 3.2 revolves around the passing of information. It implies nothing in itself about action which may or may not follow from the passing of such information. It may frequently arise that the information allows a common appreciation of issues at stake in a case involving a Ramsar site, and provides a basis for a common appreciation about assurances and solutions which represent satisfactory outcomes, with or without additional action. It is an obligation, but is a constructive and non-threatening one in that sense.
- B.4 Issues were reviewed at COP8 (2002) in COP document Doc. 20, which formed the background for Resolution VIII.8 on “Assessing and reporting the status and trends of wetlands, and the implementation of Article 3.2 of the Convention”.
- B.5 In response to a request from the Parties at COP8, Resolution X.16, drawn up by the STRP, presents a “Framework for processes of detecting, reporting and responding to change in wetland ecological character”. The core of the Framework is a series of flowcharts showing the various stages (and decision-making points) in the overall process.
- Flowchart 1:* Detecting change in wetland ecological character of designated Ramsar sites;
- Flowchart 2:* Reporting and responding to negative human-induced change in wetland ecological character of designated Ramsar sites;
- Flowchart 3:* Reporting natural and positive change, and no change, in wetland ecological character of designated Ramsar sites; and
- Flowchart 4:* Reporting to and consideration by the Conference of Contracting Parties of change in wetland ecological character.
- B.6 Each flowchart identifies the steps in the process, identifies where decisions on next steps need to be made, and also identifies who (site managers, Administrative Authorities, Ramsar Secretariat, STRP, Standing Committee or COP) should be undertaking the steps and making the decisions.

- B.7 Further detail on these steps is provided in document Doc. 27 from COP10 (2008), plus additional text on the various processes for reporting that relate to different parts of this scheme.

“Arranging to be informed”

- B.8 Resolution VI.1 (1996) on “Working definitions of ecological character, guidelines for describing and maintaining the ecological character of listed sites, and guidelines for operation of the Montreux Record” called on Contracting Parties to support the development, by the relevant authorities within their territories, of Early Warning Systems for detecting, and initiating action in response to, change in ecological character. The Annex to the Resolution says “In order to detect actual or potential changes in ecological character, regular monitoring is required”, and presents a “framework for designing an effective wetland monitoring programme”.
- B.9 Resolution VIII.8 (cited above) urged Contracting Parties, as a matter of high priority, to put in place mechanisms in order to be informed at the earliest possible time, including through reports by national authorities and local and indigenous communities and NGOs, if the ecological character of any wetland in its territory included in the Ramsar List has changed, is changing or is likely to change, and to report any such change without delay to the Ramsar [Secretariat] so as to implement fully Article 3.2 of the Convention, and to report on these matters in the National Reports prepared on the occasion of each meeting of the Conference of the Parties”.
- B.10 The phrase "at the earliest possible time" allows for the speed of what is "possible" to vary according to the circumstances of each Party or each instance; but in legal terms this is an objective test rather than a margin of discretion.
- B.11 It is implicit in Article 3.2 that the Ramsar Administrative Authority in each Party needs to establish a mechanism by which those responsible for each Ramsar site will be aware of the requirements of the Article, and will report to the Administrative Authority when a change or likely change in ecological character has been detected. In turn, for those locally responsible for a Ramsar site to detect and report such change, or likely change, a monitoring mechanism must be in place at the site, and the COP has recommended that this should form part of the management planning process for all Ramsar sites. In practice, few reports are submitted by Administrative Authorities when changes or likely changes as defined by Article 3.2 occur, with most reports being provided instead by third parties. Concern about this has been expressed by the COP, for example in Resolution VIII.8.
- B.12 A working definition of “monitoring” is given in Ramsar’s “Framework for Wetland Inventory” (Resolution VIII.6), as follows: “Wetland Monitoring [is] the collection of specific information for management purposes in response to hypotheses derived from assessment activities, and the use of these monitoring results for implementing management. The collection of time-series information that is not hypothesis-driven from wetland assessment is here termed ‘surveillance’ rather than monitoring (refer to Resolution VI.1)”. (Both surveillance and monitoring are relevant to Article 3.2). COP10 document Doc. 27 gives a list of provisions relevant to wetland monitoring which Parties have adopted or operated to date.

- B.13 In relation to Article 3.2, Contracting Parties will need to equip themselves with mechanisms to detect likely change as well as actual change (see below). This may require processes for monitoring that go beyond monitoring of sites as such, to include also monitoring of planning and decision-making processes which may reveal a prospect or proposal of change, such as registers of consent applications for land-use/water-management change, development proposals, etc.
- B.14 Resolution VII.10 (1999) on a Wetland Risk Assessment Framework called on Parties to ensure that management plans for Ramsar sites and other wetlands include, as an integrated element, early warning indicators as part of a monitoring programme based on the framework adopted by Resolution VI.1. Risk is described in terms of the combination of the likely effects and the degree of exposure. Resolution XI.9 on “An Integrated Framework for avoiding, mitigating, and compensating for wetland losses” also offers a simple risk evaluation matrix based upon “likelihood” and “impact”.
- B.15 Early warning indicators are defined in Res. VII.10 as “the measurable biological, physical or chemical responses to a particular stress, preceding the occurrence of potentially significant adverse effects on the system of interest”. Such “early warning” may not necessarily provide firm evidence of environmental degradation, but it provides an opportunity to determine whether intervention or further investigation is warranted. In relation to wetlands, the vast majority of early warning techniques have been developed to assess the impacts of chemicals. It may be useful to select early warning indicators according to those components that are considered more susceptible to change - but there is often a tradeoff between measurability/sensitivity and ecological relevance. There is an important role also for coarse “first pass” rapid assessment techniques.
- B.16 As COP11 document Inf. 24 has pointed out, the Res. VII.10 definition of early warning indicators refers only to biological, physical and chemical parameters, whereas other types of parameters, such as social or economic ones, should probably also be considered. This could especially be the case when considering the trade-off between early warning capability versus ecological relevance, since such social and economic parameters may often provide earlier warning. Moreover, these parameters could in some cases have meaningful ecological relevance, too – for example where an area’s human population is increasing or declining, or where a fall in local incomes predictably leads to a switch in resource use, there may be predictable (albeit perhaps indirect) relationships between those things and their ecological consequences.
- B.17 The indicator concept outlined in Res. VII.10 is based on the observable beginnings of actual change in the wetland, hence the reference to “responses to ... stress” rather than using indications of the stress itself. It might be thought, however, that where cause-effect relationships are clearly substantiated from past evidence, then “threat” parameters, i.e. proxies and potentialities for actual detriment (such as development approvals or intensification of fishing effort), could also be a valid risk indicator, even when no ecological response has (yet) occurred.
- B.18 Extending the scope of early warning indicators beyond biological, physical or chemical responses would also seem to be necessary because of the

extension in 2005 (Resolution IX.1 Annex A) of the Convention's previous definition of wetland ecological character (Resolution VII.10, 1999) to include the wetland's ecosystem services. Early warning indicator systems for potential change in ecological character should now therefore include indicators of potential change in delivery of the given wetland's services to people, as well as changes in its biological, physical and chemical attributes.

Ecological character

- B.19 The Convention's definition of ecological character is most recently given in Resolution IX.1 Annex A: "Ecological character is the combination of the ecosystem components, processes and benefits/services that characterise the wetland at a given point in time. Within this context, ecosystem benefits are defined in accordance with the Millennium Ecosystem Assessment definition of ecosystem services as 'the benefits that people receive from ecosystems'".
- B.20 As explained in Resolution X.15 on "Describing the ecological character of wetlands, and data needs and formats for core inventory: harmonized scientific and technical guidance", if human-induced adverse change in the ecological character of a designated Ramsar site is to be detected and reported under Article 3.2 of the Convention text, a baseline description of ecological character is needed against which to assess change. This must move beyond the *definition* of the concept to a treatment of the *constituent parts of what goes to make up* ecological character.
- B.21 The Resolution, pointing out that the lack of guidance on methods for describing ecological character was recognized in Resolution IX.2, provides guidance on compiling such descriptions, and invites Parties and those responsible for the management of Ramsar sites to apply them in the preparation of ecological character descriptions of Ramsar sites, and as part of their management planning processes, so that these descriptions constitute a complementary basis to the Information Sheets on Ramsar Wetlands (RIS) for detecting and notifying changes in ecological character under Article 3.2.

Change in ecological character

- B.22 The Convention's definition of change in ecological character is most recently given in Resolution IX.1 Annex A: "For the purposes of implementation of Article 3.2, change in ecological character is the human-induced adverse alteration of any ecosystem component, process, and/or ecosystem benefit/service".
- B.23 The importance of addressing change in ecological character is related to the fact that under the Convention there is an objective of maintaining this character. There are some curiosities in the logic of this, however.
- B.24 Article 3.1 of the Convention commits Parties to promote the conservation of Ramsar sites, and Article 3.2 requires action if the ecological character of a site changes or is likely to change. These were not linked, however, by saying that conservation means maintenance of the ecological character until the Strategic Plan did so in 1996 (in the then Operational Objective 5.1), and then paragraph 20 of Resolution VIII.8 reinforced this. Recommendation 4.8 in 1990 emphasised the fundamental importance of maintaining the

ecological character of sites, but only as a preambular remark. Resolution VIII.14 adds another complexity in referring to “favourable conservation status” as the objective for sites.

- B.25 Two separate clauses in the Convention provide for reporting change in site extent and change in character respectively (Articles 2.5 and 3.2). This potentially suggests that reducing the area is not a change in the character. That would be counterintuitive, and the definitions are hopefully more clear if one assumes that “area” is one of the “components” (which is the approach now taken in Res. X.15) – but the oddity in the Convention text itself remains.
- B.26 A further point to emphasise is the “processes” part of the definition – i.e. a change in processes, even when numbers and extent of features etc. remains the same, constitutes a change in character.
- B.27 The annex to Resolution X.15 (referred to above) suggests that a copy of the completed ecological character format for a site, with relevant details entered into the “change/likely change” column, can act as the simple alert mechanism required to trigger the processes for implementing Article 3.2 requirements and for submitting the Article 3.2 report to the Ramsar Secretariat.
- B.28 The STRP concluded at its mid-term workshop meetings in February 2010 that change in wetland ecological character as a result of climate change should be regarded as lying beyond the scope of Article 3.2 (regardless of whether or not it is anthropogenic), and that the use of Article 3.2 in this context should be discouraged. The context for consideration of climate change is instead Resolution X.24 (2008) on “Climate change and wetlands” and Res. XI.14 (2012) on “Climate change and wetlands: implications for the Ramsar Convention on Wetlands”.

Actual change and likely change

- B.29 The Convention text in Article 3.2 was far-sighted in requiring formal communication not only about those site changes that have happened or are happening, but also about those deemed “likely” to happen. This allows anticipatory/preventive action, which is usually the wisest and most cost-effective kind.
- B.30 Judgements based on a risk assessment approach are particularly helpful here, and reference has been made above to the Ramsar “Wetland Risk Assessment Framework” (Resolution VII.10) and its guidance on early warning indicators.
- B.31 No guidance has been given, however, on what degree of “likelihood” or confidence is sufficient to require the triggering of the Article 3.2 process. Clearly it would defeat the aim of this provision if strict standards of evidence and substantiation were imposed. On the other hand, the system might be open to abuse (or at least ineffectiveness) if the merest suggestion or anxiety on the part of one person were enough to create the legal reporting obligation. The appropriate approach will lie somewhere in a middle ground of informed, authoritative or expert judgement.

Human-induced change and “natural” change

- B.32 Article 3.2 refers only to reporting human-caused changes in ecological character. Resolution VIII.8 recalls that “Resolution VI.1 interpreted ‘change in the ecological character of a site’ as meaning adverse change, caused by human activities, and noted that this excludes the process of natural evolutionary change occurring in wetlands”.
- B.33 Resolution IX.1 Annex A elaborated further: “The inclusion of specific reference to Article 3.2 of the Convention text within the definition [of change in ecological character] is designed to clarify the maintenance obligation for the ecological character of listed Wetlands of International Importance (Ramsar sites) under Article 3.2, and to note that such change concerns only adverse change caused by the actions of people. This is in line with the context of Article 3.2 and Recommendation 4.8 (1990) establishing the Montreux Record, which was re-affirmed by COP8 Resolution VIII.8. For the purposes under the Convention, this definition therefore excludes the processes of natural evolutionary change occurring in wetlands and also excludes positive human-induced change.”
- B.34 There is, however, no guidance provided to Parties on how to distinguish human-caused changes from naturally-occurring changes. In practice this can be difficult, since, for example, an apparently natural change to a site may in practice be the consequence of a human-caused *ex situ* change, such as changes in the water management elsewhere in a river basin. Furthermore, some changes considered to be natural may be an indirect consequence of a human activity, such as ecosystem change resulting from global climate change driven by human-caused increases in greenhouse gas emissions.
- B.35 It should be noted that other actions adopted by the Convention, such as those concerning assessing the overall status and trends of wetlands and Ramsar sites, require information on all types of change in ecological character – positive and negative, natural and human-induced (as is recognised in COP8 Doc. 20 and by Resolution VIII.8).

Positive change and negative change

- B.36 The Annex to Resolution VI.1 emphasises that “change in the ecological character of a site is interpreted as meaning adverse change, in line with the context of Article 3.2 of the Convention and Recommendation 4.8 (1990), which established the Montreux Record”.
- B.37 Both Article 3.2 and the definition of “change in ecological character” now in Resolution IX.1 Annex A relate only to adverse change. Positive changes are therefore not anticipated to feature in Article 3.2 reports. Positive changes should be addressed, however, in several other reporting processes that are provided for under the Convention. (These are discussed further in COP10 document Doc. 27, and the Annex to Res. VI.1 mentions that wetland restoration and/or rehabilitation programmes may lead to favourable human-induced changes in ecological character).

Change that is meaningful enough to count as change for the purposes of Article 3.2

- B.38 Article 3.2 is unqualified as to the magnitude or significance of the changes in ecological character of wetlands to which it refers. It implies that any change, no matter how trivial, should be reported. Clearly to do so would be neither practical nor helpful, but the Convention has never spelled out a way of deciding how big a change is a “real change” for this purpose, nor how to take account of naturally fluctuating baseline states.
- B.39 The issue may therefore be considered to have two main parts. The first concerns the idea that despite the unqualified terms of Article 3.2, some instances of change ought on any reasonable view to be regarded as too trivial to require reporting, meaning in effect that they are not regarded as change at all within the terms of the Article. The question then is how to define generally, or decide in an individual case, what is the cut-off threshold between (a) trivial changes which can be ignored and (b) other changes which may be indicating something real that requires a response.
- B.40 The second part concerns the definition of the pre-existing or baseline state against which the arrival of a change is to be discerned. The categories of baseline information, and some elements of the precision with which it should be described, are covered in the Convention’s guidance on describing wetland ecological character (Resolution X.15, 2008) and on the Ramsar Information Sheet (Res. XI.8). Guidance to date however has not discussed how to distinguish between (a) a Ramsar Site’s natural range of variation and (b) some perturbation which becomes superimposed on it and signals an issue of concern.
- B.41 COP11 document Doc. 24 looks at examples of limit-setting in relation to waterbirds, water quality, and an Australian approach relating to the wetland ecological character description system.

(a) Absolute magnitude/triviality

- B.42 Resolution VIII.8 requested guidance on this, and it has subsequently been examined in COP10 document Doc. 27 and COP11 document Doc. 24. It concerns how to define the cut-off threshold between “*de minimis*” changes which can be ignored and other changes which may be indicating something real that requires a response.
- B.43 A site management plan is the place where limits of acceptable change (or equivalent – see below) should be defined, by reference to management objectives. In the most simplistic sense, anything that falls within the tolerance “bandwidth” for these objectives, if they are properly defined, should be “trivial” in the sense of not requiring an Article 3.2 report.
- B.44 Several fields of law, finance and quality assurance operate a concept of triviality referred to as “*de minimis*”. In the legal sphere this derives from the Latin phrase “*de minimis non curat lex*”, or “the law does not concern itself with trifling matters”. In a planning law context, for example, it can refer to aspects of development or land-use change which are sufficiently trivial as not to qualify as development at all for the purposes of planning regulations. The way this may be manifest tends not to be objectively prescribed in

statutes, but to be ultimately a matter of judgement by the courts based on the facts of an individual case.

- B.45 Such judgements need to address the effect of the change as well as its inherent nature/magnitude. In the Ramsar Site context, triviality or significance is not something that will be judged, for example, simply in terms of the extent of the wetland area affected by change, since the question relates to the ecological character and the functionality of the wetland.
- B.46 The same legal and financial fields also commonly operate a complementary concept of “materiality”. Again the determination of what is or is not a “material change” is a matter of judgement based on the facts of the individual case, assessed with regard to the relative (rather than absolute) significance of the issue in its context, and with regard to its potential effects (for example, whether a decision or other outcome could reasonably be assumed to be influenced by the change).
- B.47 Some approaches to this question suggest further distinctions (which, applied to ecological situations at least, are not necessarily mutually exclusive). “Materiality by value” would concern a magnitude of change that of itself is inherently too large, relative to the field of interest in question, to be reasonably ignored. “Materiality by nature” would concern a change which may not be large in value but which is of key importance or sensitivity, perhaps concerning a critical variable on which many other variables normally depend, or which has special sensitivity in terms of available responses. “Materiality by context” would concern a change which at one site may be neutralised by other factors and have no effect, but at another site may be exacerbated by other factors and have a material effect, perhaps being the final incremental ingredient which produces a “tipping point” or “threshold change” from one state to a different state.
- B.48 A practical conclusion to this might be to acknowledge that Article 3.2 could be read as though it contained the qualification which it has so far lacked, namely a *de minimis* exclusion; but recognising at the same time that this must not be misused as a broader derogation.

(b) Significant departure from a baseline norm

- B.49 The “New Guidelines for management planning for Ramsar Sites and other wetlands”, annexed to Resolution VIII.14, advise that in the site management planning context, “limits for ecological character features should be developed in recognition of the natural dynamics and cyclic change in populations and communities”.
- B.50 The Guidelines further point out that “in reality, there are very few features for which the natural fluctuations are fully understood”. COP11 document Inf. 24 notes also that even where long time-series data are available, different but equally “natural” fluctuations may have occurred in earlier historical periods, including even “step” changes between different stable states.
- B.51 Ramsar guidance makes reference in several places to the “naturally functioning [wetland] ecosystem” as part of the reference conditions against which objectives are set and changes are monitored. What constitutes “natural functioning” is a judgement that will normally need to be site-specific,

and hence it is not a subject on which global Ramsar guidance has been developed.

- B.52 The same applies to the natural (or often more correctly perhaps, the “typical”) tendency which may be exhibited by a given site to vary over time. This is usually interpreted to relate to fluctuations around a mean position rather than directional tendencies, but natural succession may sometimes be relevant, and climate-related change may add another layer of complexity (see below).
- B.53 The guidance adopted by the Parties has noted the importance of considering the natural variability when establishing baselines. Resolution VI.1 in 1996 stated that “monitoring should establish the range of natural variation in ecological parameters at each site, within a given time frame. Change in ecological character occurs when these parameters fall outside their normal range”.
- B.54 This was then reinforced in guidance on completing the Ramsar Information Sheet (most recently in Annex 2 to Resolution XI.8) which notes that a completed RIS should include information on “the natural variability in the ecological character of the site (either seasonally, or longer-term if known), and any known past and current trends in ecological character, such as seral vegetation succession in part or all of the site”. The accompanying guidance on providing maps and other spatial data further advises that “where there is substantial seasonal variation in the extent of the wetland, separate maps showing the wetland extent in the wet and in the dry seasons are helpful”.
- B.55 Information on variability should also be captured in relation to explanation of the site’s qualification under the selection criteria for listing it as “internationally important”. Guidance is given on this in relation to cases where the application of waterbird criteria 5 and 6 is relevant (“Strategic Framework and guidelines for the future development of the List of Wetlands of International Importance”, annexed to Resolution XI.8).
- B.56 This refers for example to the fact that a simple arithmetical average number of birds using a site over several years may not adequately reflect the true ecological importance of the site. A site may be of crucial importance at certain times (“ecological bottlenecks”), but hold lesser numbers at other times. In such situations, there is a need for interpretation of data from an appropriate time period in order to ensure that the importance of sites is accurately assessed.
- B.57 Description of baselines in the present context is a somewhat artificial construct for the particular expedient of operating the Convention’s “change-reporting” requirements. It is subject to distortion by artefacts such as the choice of designation/ecological character description date, non-standardised levels of research effort, and the evolving efficacy of survey techniques. It should not be over-interpreted beyond its design tolerances, and the assumptions and limitations that apply in any given case should always be explicitly stated.
- B.58 It is important also to note that the use of “natural variation” information in this context is not simply a question of trying to distinguish the “noise” above which we wish to detect a “non-fluctuational” “signal”, since the change

requiring a response in a given case may be to the characteristics (e.g. the timing) of the fluctuations themselves.

Novel ecosystems

- B.59 COP11 document Inf. 24 cites an argument in a published paper by P Bridgewater in 2008 (in the context of the Ramsar rubric on maintenance of ecological character) that ecosystems inevitably change: they process energy, nutrients and information to evolve in a more complex and apparently more stable direction; yet while they so do, Earth-scale change processes slowly re-define the contextual conditions, so that even “stable” or “climax” ecosystems are simply steps in a continuing progression. While it is therefore understandable that Ramsar requirements have been written in terms of human-scale comprehension of the space and time parameters of ecological processes, striving at specific sites to fix these parameters within hard tolerance limits may not reflect the underlying reality.
- B.60 The argument continues that change in this sense could be embraced rather than automatically resisted, through assessment and reporting processes which add to our understanding of wetland ecosystem functioning, to inform future policy development, decision making and priority setting under the Convention, including the management of Ramsar Sites. Hence maintenance of (or prevention of change in) ecological character might not be the most appropriate measure of success in managing these sites.
- B.61 Persuasive though these points might be, Contracting Parties are committed to implementing the requirements of the Convention as they stand. They are rightly obliged to guard against unwanted deterioration of wetland resources for unjustified reasons, and the dangers of abuses of any perceived “laissez faire” “change embracing” approach are obvious. The challenges of distinguishing unwarranted and unwanted change from inevitable and “natural” change remain, as do the challenges of distinguishing meaningful change from “trivial” change.
- B.62 Resolution IX.6 has noted that irreversible change to new stable state in Ramsar site might result in its continuing to qualify by meeting the international importance criteria on a different basis.

Limits of Acceptable Change/Limits for Defining Change in Ecological Character (LDCEC), for both purposes (a) and (b) above

- B.63 The first official use of the term “limits of acceptable change” in the Ramsar context was in the “Guidelines on management planning for Ramsar Sites and other wetlands” adopted in 1993 as the annex to Resolution 5.7 on “Management planning for Ramsar Sites and other wetlands”. It was linked to the idea of staying true to site management objectives, rather than being designed with implementation of Article 3.2 in mind.
- B.64 COP10 document Doc. 27 emphasises that the site management plan (see below) should be the place where limits of acceptable change are defined, by reference to management objectives.
- B.65 Resolution VIII.14 on “New Guidelines for management planning for Ramsar sites and other wetlands” includes text on “operational limits”, whose purpose is described as to define a range of values for each factor which will be

considered acceptable and tolerable levels. In most instances it will not be possible to set precise, scientifically defined limits. This should not be considered a major issue, however. Operational limits are an early warning system, acting as a trigger for action, reached long before there is any significant threat to the long-term viability of the feature. If scientific information is not available, then professional experience comes into play.

- B.66 A section is also given on “specified limits”, which represent thresholds for action and should trigger an appropriate response. They define the degree to which the value of a performance indicator is permitted to fluctuate without creating any cause for concern.
- B.67 A sufficient safety margin must always be allowed to account for the possibility of unexpected changes or unforeseen impacts. In many ways, limits can be regarded as limits of confidence. When the values of all performance indicators fall within the limits, it can be confidently considered that the feature is at favourable conservation status; when the limits are exceeded, that confidence disappears.
- B.68 COP11 document Inf. 24 explains that Limits of Acceptable Change (LAC) is probably not the appropriate term to use for the purposes of Article 3.2 because a process with the same name has been in common currency in the protected areas sphere for many years, specifically in the United States, where it has a different meaning. In that context it arose from using e.g. visitor numbers as a trigger for different management strategies, depending on the (largely recreation-based) specific management objectives at a given site. It is a way of framing compromises and tradeoffs and a method for undertaking iterative steps of adaptive management of these, rather than a way of setting tolerance thresholds. In this context it also includes standards for non-ecological parameters.
- B.69 LAC is thus very different from the “signal to noise” distinction being sought in the context of Ramsar Article 3.2. Use of the same terminology in both contexts has caused confusion, and future approaches should try to reduce this. The Guidelines in Resolution VIII.14 recognised this and concluded that it was not appropriate to extrapolate from US recreation-based LAC concepts to contexts of maintenance of ecological character. Accordingly the Resolution removed the reference to LAC that had been in the previous version of the management planning guidance, and included text instead on “operational limits” and “specified limits”.
- B.70 Document Inf. 24 notes that this conclusion was then nevertheless mostly overlooked in discussion of Article 3.2, and saw that there was still a need to adopt different terminology for defining how much change constitutes relevant change for the purposes of the Article. It recommended therefore that for Article 3.2 purposes, the term “Limits for Defining Change in Ecological Character” (LDCEC) should be used instead.
- B.71 The document reviews some examples of existing approaches, such as those used in South Africa and Australia. In the latter case, the Australian ecological character description system uses a concept of LAC which is defined directly in relation to Ramsar requirements concerning maintenance of ecological character, rather than in the US recreation-management sense: it therefore exemplifies the divergence discussed above.

- B.72 The definition of limits of acceptable change adopted in the Australian guidance is “the range of variation in the components, processes and benefits or services that can occur without causing a change in the ecological character of the site”, and also “the tolerance that is considered acceptable without indicating a change of ecological character is occurring”. The inference is that if the particular measure or parameter moves outside the limits of acceptable change this may indicate a change in ecological character.
- B.73 In the process of compiling their ecological character descriptions, wetland managers in the Australian approach would be expected to describe the natural variability and limits of acceptable change for each of the “critical” components, processes and benefits/services of their wetland, and to quantify the typical range of variability for the critical components, processes and services, and the limits of acceptable change beyond which any movement would constitute a change in condition of the wetland. Examples of types of limits are given.
- B.74 Document Inf. 24 has also discussed possible approaches to guidance on this issue. Any globally-applicable standards or guidance would need to recognise huge capacity constraints in some countries, while at the same time giving good direction for those that already have intricate delivery mechanisms.
- B.75 General “framework” principles which could be applicable anywhere might be set out, otherwise leaving more detailed aspects to national discretion. This would need to be weighed against the risk of divergent and potentially contradictory approaches developing in different places. It also may not provide sufficient help for countries wanting guidance on how to develop in the right direction. It further may not satisfy the needs of those Contracting Parties where cutting-edge conceptual challenges are being put to the test, potentially in arenas of legal dispute where the financial and political stakes are high, and where a global reference framework and some leadership from the Convention might be expected.
- B.76 An alternative would be to provide advice in a “tiered” form, establishing the minimum basic expectations, and then offering layers of progressively more developed guidance on approaches that are recommended, subject to the requisite levels of capacity. (In every case, of course, the actual limits themselves will be specific to the circumstances of an individual site: although case examples can be listed, and a range of possibilities provided, it would be no part of global advice to attempt to prescribe the specifics of what the limits should be in any given instance).

The role of management plans

- B.77 The adoption of a properly-constructed management plan for each Ramsar Site is not a mandatory requirement under the Convention, but it is a strong expectation, and such plans offer perhaps the most logical place for deriving the limits that are relevant to the operation of Article 3.2. Detecting, reporting and responding to change in ecological character ought to relate to management objectives set for each individual site concerned.
- B.78 Resolution VIII.8 recognises that the establishment of a management planning process on all Ramsar sites greatly facilitates the identification,

reporting and resolution of changes in ecological character, and that inclusion in each management plan of an objective of maintenance of the ecological character of the site provides a basis for implementation of Article 3.1 of the Convention. (Article 3.1 provides that “The Contracting Parties shall formulate and implement their planning so as to promote the conservation of the wetlands included in the List, and as far as possible the wise use of wetlands in their territory”).

- B.79 More detailed objectives, specific to the individual site, will provide an appropriate basis for considering Limits for Defining Change in Ecological Character, as discussed above. Management plans and their implementation therefore have a key role to play in this overall scheme. Further guidance is provided in the annex to Resolution VIII.14.

Reporting change (“passing information without delay”)

- B.80 Resolution VIII.8 (2002) urged Contracting Parties, as a matter of high priority, to “put in place mechanisms in order to be informed at the earliest possible time, including through reports by national authorities and local and indigenous communities and NGOs, if the ecological character of any wetland in its territory included in the Ramsar List has changed, is changing or is likely to change, and to report any such change without delay to the Ramsar [Secretariat] so as to implement fully Article 3.2 of the Convention”.
- B.81 The COP also requested a “simple format” for Article 3.2 reporting. The Secretariat in 2005, and Wetlands International in 2006 (in its capacity as administrator of the Ramsar Sites database) both drafted proposals for this. Ultimately however the issue was tackled by suggesting that Parties use the “change” column in the Ecological Character Description sheet (Resolution X.15). This column invites information on any changes or likely changes in each aspect of ecological character described on the sheet, by reference in particular to “limits of change” defined, for example, in relation to management plan objectives.
- B.82 The Convention has various periodic and systematic information collation processes. The primary force of Article 3.2, on the other hand, is that it envisages a “real time” or “as it happens” communication system, so that responses to specific issues can be prompt and effective. The system is designed primarily as an action tool, rather as merely than a research tool. The phrase in the Article “without delay” is critical to this, and yet it is extremely poorly observed by most Parties, or in many cases even ignored. This must change in future, if the credibility and utility of the Convention as a whole is not to be undermined.
- B.83 The system in the meantime relies heavily by default on the assistance that can be provided by NGOs and civil society in passing information in cases of ecological change affecting sites. Much can be done in a constructive way by Contracting Party governments that engage in partnership arrangements with NGOs on these matters. Helpful though this is, however, it is not an adequate substitute for government authorities playing their full part in honouring the obligations they have accepted under the Convention and “passing information” in an authoritative and statutory way.

- B.84 The process for using Article 3.2 reports in presenting information to the COP is important, but lies beyond the terms of reference for the present report. It is discussed further in COP10 document Doc. 27.
- B.85 The basic provision is that under Article 8.2 of the Convention, the Secretariat has the function of forwarding notification of “any alterations to the List, or changes in character of wetlands included therein, to all Contracting Parties and to arrange for these matters to be discussed at the next Conference”. Under Article 6.2 the COP is empowered to consider Article 3.2 information and to make “general or specific” recommendations to Parties, and the Secretariat in turn has a mandate (under Article 8.2) to “make known to the Contracting Party concerned, the recommendations of the Conferences in respect of such alterations to the List or of changes in the character of wetlands included therein.”
- B.86 Other options for responses to a report of change or likely change in ecological character of a Ramsar site also lie beyond the scope of the present report, with the exception of the Montreux Record and the Ramsar Advisory Missions process which are discussed here. Response options more generally are discussed further in COP10 document Doc. 27.

Annex C

Articles 2.5 and 4.2: Key aspects of existing guidance and interpretations

- C.1 Article 2.5 of the Ramsar Convention states that “any Contracting Party shall have the right ... because of its urgent national interests, to delete or restrict the boundaries of wetlands already included by it in the List”. According to Article 4.2, “where a Contracting Party in its urgent national interest, deletes or restricts the boundaries of a wetland included in the List, it should as far as possible compensate for any loss of wetland resources”.
- C.2 COP Resolution VII.23 requested the development of guidance for the interpretation of Articles 2.5 and 4.2, while Res. VII.24 invited the definition of criteria and guidelines for the compensation of wetland habitats in the case of unavoidable losses. Part of the response to this was the provision of a report for the Standing Committee in 2000 by the IUCN Environmental Law Centre (ELC), and a companion commentary was provided at the same time by BirdLife International. Procedures and responsibilities of Parties in relation to Article 2.5 were subsequently covered by the guidance adopted by COP8 as the Annex to Resolution VIII.20, referred to also in COP10 document Doc. 27 and Handbook 19 (4th edition, 2010). The key points below are synthesised from all of these sources.

URGENT NATIONAL INTERESTS - ARTICLE 2.5

- C.3 Actions resulting in a change in ecological character may on occasion arise as a deliberate official choice by Contracting Party authorities, where tradeoffs are seen to be necessary between different competing public interests in the same area, e.g. legally mandated conservation on the one hand and legally mandated development on the other.
- C.4 In such cases, where Ramsar sites are concerned, Article 2.5 requires that a test of “urgent national interests” be met, in relation to the exceptional need for the action that will produce (or threatens potentially to produce) the change in character; assuming that a change in Ramsar status of the site or a change in its boundaries would follow.
- C.5 A number of cases have produced elaborations of thinking on the “urgent national interests” test (see, for example, the report of Ramsar Advisory Mission No. 46 in 2001 concerning the Mühlenberger Loch Ramsar site in Germany).
- C.6 The term “urgent national interests” is not defined in the Convention. ELC did not find another existing international context where it was in use and from which a definition could be imported to assist in Ramsar. Nevertheless, a number of similar terms exist which provide concepts which could be applied in some way.
- C.7 One example is the concept of “state necessity”, which was codified in the International Law Commission’s “Draft Article on the International Responsibility of States” as a condition which relieves a state from treaty

obligations it has undertaken, but only under very strict limitations. It might arise in relation to acts which are the only means of safeguarding an "essential interest" of the State against a "grave and imminent peril"; though not where the State in question has contributed to the occurrence of the state of necessity. Other conditions that have been codified include "force majeure", "distress" and "self defence".

- C.8 The concept of state of necessity was examined in detail by the International Court of Justice in the *Gabcíkovo-Nagymaros* case, where Hungary declared its termination of a treaty agreement with Slovakia concerning joint construction of a system of locks on the Danube river, based on what it claimed was a "state of ecological necessity". The Court acknowledged that the state of necessity is a ground recognised by customary international law, but is one to be accepted only on an exceptional basis, including (by reference to the ILC's Draft Article) the condition that the State in question must not have contributed to the occurrence of the state of necessity.
- C.9 The ELC argued therefore that the elements of "essential interest" and a "grave and imminent peril" can be clearly analogised to the concept of urgent national interest; and that a State which contributed to a threat to its national interest, through poor policy or otherwise, should not be able to invoke Ramsar Article 2.5 as a defence for avoiding its Ramsar obligations. The Court in *Gabcíkovo-Nagymaros* rejected Hungary's claim, and set the standard to be met with these tests at a very high level.
- C.10 Another concept providing interpretative guidance is that of "imperative reasons of overriding public interest" as found in the European Union's Directives on birds and habitats, as a potential justification for carrying out a project in spite of a negative assessment of its effects. In a sub-set of such cases where "priority habitat types/species" are implicated, the only considerations which may be raised are those relating to human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest. In all cases there must be an "absence of alternative solutions". It is clear that only public interests, promoted either by public or private bodies, can be balanced against the conservation aims of the Directives. Projects that lie entirely in the interest of companies or individuals would not be covered.
- C.11 Similar concepts appear in other fields of European Community law; for example the European Court developed an "imperative requirement" concept as an exception to the principle of free movement of goods; including among such imperative requirements public health and environmental protection, as well as the pursuit of legitimate goals of economic and social policy. There is also a concept of "service of general economic interest" as an exception to the normal rules of competition for companies responsible for relevant services; and defined so as to include services relating to transport, energy and communication networks.
- C.12 "General economic interest" would appear to set a lower threshold than "national interest", and should come lower in any hierarchy than the Ramsar test, because of the latter's additional element of "urgency".

- C.13 It seems reasonable to assume that a public interest can only be “overriding” if it is long-term. Short term interests would not appear to be sufficient to outweigh the long-term conservation interests protected by the Directives.
- C.14 “Imperative reasons of overriding public interest, including those of social and economic nature” are therefore considered to refer to situations where plans or projects prove to be indispensable within the framework of policies for the protection of fundamental values for the life of citizens (human health, public safety, environmental benefit), fundamental policies for the State and society, or carrying out activities of economic or social nature which fulfil obligations of public service.
- C.15 A test of “indispensability”, implied by the description above, may have good merit (and would be a more exacting standard than some of the current interpretations of overriding interest). Some cases that have tested these issues have involved proposals which proponents feel able later to withdraw, and which on that basis would presumably fail to meet such a test (for example the case of the Port Phillip Bay Ramsar site in Australia in 1997).
- C.16 A further nuance was added in the EU context by the case of Leybucht Dykes (Belgium), where the Court of Justice in 1991 stated that as a matter of general principle, the grounds justifying reduction of a site designated under the Wild Birds Directive must correspond to “a general interest which is superior to the general interest represented by the ecological objective of the Directive”. In that case, the danger of flooding and the protection of the coast were deemed to constitute such a superior interest and to justify the works, as long as these were confined to a strict minimum.
- C.17 “No net loss of wetlands” and related policies in US and Canada have addressed public interest factors in more of a “sliding scale” way, rather than defining threshold concepts of “overriding” public interest or “urgent” interest at the national level.

“Urgent”

- C.18 The ELC review cited definitions of “urgent” in English as “pressing, impelling; demanding or calling for prompt action”, in Spanish (“urgencia”) as “necesidad o falta apremiante de lo que es menester para algún negocio”, and in French (“urgente”) as “qui ne souffre pas retard”. While some of the elements of these definitions mirror concepts of “imperative” (EU Directive) or “paramount” (African Convention), the element of time-pressure for prompt action is a distinct additional element in Ramsar’s test.
- C.19 Another way to consider it is to say that if the *status quo* can be maintained without threatening a national interest, then the situation cannot be considered urgent. A situation that is quickly deteriorating will require more urgent attention than one that is slowly changing. It should be clear whether the situation is critical, presenting a significant danger imminently posed by the action or inaction. The more critical the situation, the more urgent the need for action.
- C.20 On this basis, while “urgent” might easily apply to some national public interests such as security or flood defence, it is less easy to see it normally applying to economic interests.

- C.21 The International Court of Justice in the Gabcíkovo-Nagymaros case (referred to above) interpreted the “imminent peril” test applied in that instance as meaning that the mere apprehension of a possible peril could not suffice. “Imminence” was interpreted as synonymous with “immediacy” or “proximity”, thus going far beyond the concept of “possibility”. The peril must be a threat to the interest at the actual time. That does not exclude that a peril appearing in the long term might be held to be imminent as soon as it is established that its realisation is inevitable.

“National”

- C.22 The ELC review cited definitions of “national” in English as "of or belonging to a nation; affecting or shared by, the nation as a whole; devoted to the interests of the nation as a whole"; in Spanish ("nacional") as "perteneciente o relativo a una nacion" and in French as “relatif à une nation, qui appartient à une nation”.
- C.23 The affected interest should be clearly defined in its national context. It might for example include significant unemployment, environmental degradation or economic depression that would occur without the action. Relating the asserted interest to a stated national policy could add further weight. Scale here is clearly relevant - a project that provides benefits to large base of recipients will be more easily characterised as serving a national interest than one which serves a single individual or company. The greater the benefit, the more multi-faceted it is, and the longer the time-span of its resultant benefits, the more likely it is that it can be characterised as a national interest.

“Interest”

- C.24 There must be an examination of all alternatives to potential site deletion or boundary restriction, and an option that will eliminate, minimise or not cause harm to the Ramsar site must be chosen. The search for alternatives should be viewed as a search for alternative *solutions*, not simply alternative sites for a proposed development, or alternative ways of proceeding with the particular proponent's wishes. There are three parts to this.
- C.25 First, the objective of the plan or project for which a less damaging alternative is sought, is not necessarily an objective defined by the proponent. The proponent may for example be just one developer responding to an objective defined in a land use plan or other strategy, and an "alternative solution" could be that the objective might be achieved by a different developer.
- C.26 Second, the "alternative solution" could be that for example an energy-use objective be met by energy conservation measures rather than new power generation capacity, or that a commodity-provision objective be met by re-negotiating import restrictions rather than increasing domestic manufacturing - in other words the alternative may lie in a completely different realm from the initial proposal.
- C.27 Third, consistent with environmental impact assessment norms, the alternative solution may be a "do nothing" option. Given this, the right way to interpret the concept of an “alternative solution” may not be in the sense of a "solution to the problem of how to find a way of achieving a defined plan/project objective", but rather a "solution to the problem of how to resolve a decision-making dilemma".

Decision-making procedures

- C.28 In keeping with Article 2.3 of the Convention that “the inclusion of a wetland in the List does not prejudice the exclusive sovereign rights of the Contracting Party in whose territory the wetland is situated,” the determination of “urgent national interests” lies solely with the Contracting Party. Resolution VIII.20 (annex) emphasises that the general guidance it provides does not prevent a Contracting Party from maintaining or introducing more stringent regulations for the application of Articles 2.5 and Article 4.2 if it so wishes.
- C.29 Resolution VIII.20 (annex) provides that when invoking its right under Article 2.5 to delete or restrict the boundaries of a listed site in the case of urgent national interests, a Contracting Party may take into account, inter alia:
- (i) the national benefits of maintaining the integrity of the wetlands system and its related benefits;
 - (ii) whether maintaining the *status quo* threatens a national interest;
 - (iii) whether the proposed change is consistent with national policies;
 - (iv) whether the immediate action is required to avert a significant threat;
 - (v) whether a national interest is being increasingly threatened;
 - (vi) all reasonable alternatives to the proposed action, including the “without project” option, finding an alternative location, introducing buffer zones, etc.;
 - (vii) the existing functions and economic, social and ecological values of the site in question. (The more important the site’s values and functions, the higher should be the social, economic, or ecological benefits of the proposed project.);
 - (viii) the particular value of habitats harbouring endemic, threatened, rare, vulnerable or endangered species;
 - (ix) whether the proposed action provides benefits to a large base of recipients;
 - (x) whether, over the long term, the proposed action offers greater benefits;
 - (xi) the alternative that will best minimize harm to the site in question; and
 - (xii) transboundary effects.
- C.30 The determination of whether a project falls within the Convention’s use of the term “urgent national interest” should be made following social, environmental and economic assessments of the impact of both the project and the restriction or deletion of the Ramsar-designated area. A prior environmental assessment, taking into consideration the full range of functions, services, and benefits offered by the wetland, would normally be an appropriate first step. Whenever possible, the assessment should be made in full consultation with all stakeholders. (See also Resolution X.17 on “Environmental Impact Assessment and Strategic Environmental Assessment: updated scientific and technical guidance”, and Ramsar Handbook 16 (4th edition, 2010)).
- C.31 Since “urgent national interests” in Art. 2.5 is not qualified by any conditional language such as “potential”, “likely” or “possible”, the threat to the national interest must be ascertained with a substantial level of certainty. While not requiring actual damage, mere speculation or assertion of a threat to the national interest, and the urgency of such a threat, would not be sufficient. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective

measures to prevent environmental degradation. (Such issues of “precaution” are further discussed in COP10 Document Doc. 27).

- C.32 Further, the burden of proof should be on the proponent of the activity to demonstrate on a balance of probabilities that the proposal falls within the realm of urgent national interests. The proof of the justification should be objective, i.e. independent of who voices it, and of the manner in which an awareness of it arises.
- C.33 Article 2.5 requires that when invoking the right to deletion or restriction under the Article in cases of urgent national interest, the Contracting Party concerned must inform the Ramsar Secretariat of the changes “at the earliest possible time”. When doing so, the Party may request advice, including from the Scientific and Technical Review Panel (STRP) and/or the Standing Committee, before any irreversible action is taken.

Situations falling outside the terms of Article 2.5 but raising related issues

- C.34 While Resolution 5.3 (1993) includes as its annex a review procedure for Ramsar sites which did not meet the criteria at the time of listing, Resolution VIII.22 (2002) noted that no guidance had been provided by the Convention to assist Contracting Parties where a Ramsar site ceases to fulfil the criteria thereafter, nor for situations in which part of a site either unavoidably loses the values, functions and attributes for which it was included in the Ramsar List or was included in error. These are situations, other than the “urgent national interest” provision of Article 2.5, where Ramsar site boundaries may warrant further definition, or where sites or parts of sites no longer merit inclusion on the List. Guidance on these matters was therefore subsequently adopted in Resolution IX.6 in 2005.
- C.35 A more detailed identification and assessment of a range of scenarios in which a listed site may cease to fulfil the criteria was also provided as COP9 document Doc. 15, which is reproduced in Handbook 19 (4th edition, 2010). Most of the situations cited do not technically involve a change in ecological character of the site. One of them does, however, namely the situation where “part or all of a Ramsar site unavoidably loses the values, functions and attributes for which it was included”.
- C.36 The challenge is to distinguish cases that are genuinely of this kind from those which should be dealt with according to Article 2.5 instead. Further treatment of this issue is beyond the scope of the present report.

COMPENSATION – ARTICLE 4.2

- C.37 When change in ecological character at a site is deemed likely, the first response obligation at that point is to maintain the character under Article 3.1 of the Convention (by implication *inter alia* of the way Article 3.2 is formulated, “conservation” in Article 3.1 is taken to equate to “maintenance of ecological character”).
- C.38 If change is occurring or has occurred, the “maintain” obligation should be interpreted as continuing in effect, which would mean an obligation to restore the interests in question, *in situ*.

- C.39 A move to a next step in the sequence would depend on a judgement that efforts to maintain, restore or rehabilitate were not succeeding and/or had no prospect of succeeding. This is often not a straightforward judgement to make, either in ecosystem management terms or in legal terms. Informed assessments and a precautionary approach will both be necessary.
- C.40 If the judgement described in the preceding paragraph is made, in effect it constitutes also a decision that the situation has moved beyond the scope of the Article 3.1 requirement, and at this point the question of compensation becomes relevant.
- C.41 Clearly, if change proceeds to the extent of a decision to restrict the boundary of the designated area, or to de-list the Ramsar site altogether (provided that the strict “urgent national interests” test in Article 2.5 for allowing either of these actions has been met), then under Article 4.2, compensatory habitat provision is required.
- C.42 Article 4.2 provides as follows: “Where a Contracting Party in its urgent national interest, deletes or restricts the boundaries of a wetland included in the List, it should as far as possible compensate for any loss of wetland resources, and in particular it should create additional nature reserves for waterfowl and for the protection, either in the same area or elsewhere, of an adequate portion of the original habitat”.
- C.43 It should be noted that the trigger for compensation under Article 4.2 is not the ecological character change itself, but instead the administrative decision that the designation should be changed, on the basis that the ecological change concerned is deemed to be irreversible.
- C.44 This is logical, since until such a conclusion is reached, the first response to character change should be to endeavour to reverse it. Only when ecological character change is considered irreversible (i.e. when restoration is not a viable option) should compensation be considered. Resolution VII.24 (1999) on “Compensation for lost wetland habitats and other functions” notes that “effective wetland protection involves the conservation of wetlands as a first choice within a three-step mitigation sequence, including avoidance, minimization, and compensation, the latter only as a last resort”.

The decision-making sequence

- C.45 Although this three-step approach has been consistently urged in several past Resolutions, until COP11, Contracting Parties had at best had only patchy principles/guidance on when/how to move from one step to the other in such a “mitigation sequence”, and how to substantiate the justification for doing so (with the exception of remarks in Resolution IX.6 on contemplating restriction of the boundaries of a designated Ramsar site for reasons other than urgent national interest).
- C.46 At COP11 (2012) Resolution IX.9 introduced “An Integrated Framework and guidelines for avoiding, mitigating and compensating for wetland losses”, backed by a Briefing Note by the STRP (Briefing Note 3 on “Avoiding, mitigating, and compensating for loss and degradation of wetlands in national laws and policies”, which was provided as COP11 document Doc. 27).

- C.47 Res. XI.9 reaffirms the Parties' commitment to avoiding negative impacts on the ecological character of Ramsar Sites and other wetlands as the primary step. The overriding and primary duty under the Convention is to maintain the ecological character of Ramsar sites and avoid the need for compensation in the first place. The COP has previously stressed the point (in Resolutions VII.17 para 10 and VIII.16 para 10) that that avoidance must be the first priority because restoration or creation of wetlands cannot replace the loss or degradation of natural wetlands.

General guidance

- C.48 Resolution VIII.20 (2002) on "General guidance for interpreting 'urgent national interests' under Article 2.5 of the Convention and considering compensation under Article 4.2" includes the following (paragraph 4 of its Annex): "When invoking its right under Article 2.5 of the Convention in cases of urgent national interests, a Contracting Party should as far as possible compensate for any loss of wetland resources. When considering such compensation, a Contracting Party may take into account, *inter alia*, the following:
- (i) the maintenance of the overall value of the Contracting Party's wetland area included in the Ramsar List at the national and global level;
 - (ii) the availability of compensatory replacement;
 - (iii) the relevance of the compensatory measure to the ecological character, habitat, or value of the affected Ramsar site(s);
 - (iv) scientific and other uncertainties;
 - (v) the timing of the compensatory measure relative to the proposed action; and
 - (vi) the adverse effect the compensatory measure itself may cause."
- C.49 Resolution VIII.16 (2002) on "Principles and guidelines for wetland restoration" calls on Parties to apply the annexed guidance on restoration when considering the provision of compensation under Article 4.2, and when applying the provisions of Res. VIII.20 described above. Res. XI.9 offers various questions to address in deciding on compensation, and guidance on how to do so.
- C.50 The specific sections below are drawn largely from the guidance in these Resolutions, having regard also to the ELC/BirdLife legal analyses mentioned under Article 2.5 above.

Defining terms

- C.51 There has been some confusion (partly arising from different approaches around the world) about the interpretation of terms such as "compensation", "mitigation" and "off-setting". Res. XI.9 defines "compensating for wetland impacts" as "actions that are intended to offset the residual impacts on wetland ecological character that remain after any mitigation has been achieved. An example of compensation would be an on-site or off-site wetland restoration or creation project, provided it adds value beyond what would have happened otherwise".
- C.52 The same Resolution also notes that the term "wetland loss" is taken to cover both loss of wetland area and/or the loss or degradation of the ecological

character of a wetland, regardless of whether or not there is any change to its overall area.

Compensating in advance of loss

- C.53 Resolution VIII.20 advises taking into account the timing of the compensatory measure relative to the proposed action, and Res. XI.9 advises that as far as possible, mitigation and compensation (where avoidance is not feasible) should be delivered in advance of negative impacts.
- C.54 As discussed above, the sequence of actions would see compensation being a final resort when other possibilities are exhausted, and this point might only arrive when the change has already occurred. Where avoidance, prevention and remediation of change can with certainty be predicted, however (for example if an “urgent national interests” case has run its full course of decision-making, and scientific assessments predict with confidence the impossibility of maintaining the site’s character *in situ*), then although the change has not yet occurred, it will be prudent to commence compensatory measures in advance of the change, so that, for example, affected biodiversity interests have some opportunity to translocate. Compensation made after the loss of wetlands cannot be considered adequate as the carrying capacity of the system will have been reduced in the interval.
- C.55 A further reason is the inherent uncertainty involved in any manipulation of ecological systems. Most compensatory measures are essentially experimental, and time is required to verify whether they are delivering what was intended. Adaptive adjustments may be required in light of the emerging results in reality. (See also the section below on uncertainty).
- C.56 Analogous requirements in European Union legislation have been interpreted in the European Commission’s document “Managing Natura 2000 Sites: The Provisions of Article 6 of the Habitats Directive”; April 2000) as requiring that a site should not be irreversibly affected before compensation is in place. Replacement habitats to be created in advance of the losses thereby have the opportunity to demonstrate that they have equivalent biological characteristics and are functioning so as to sustain a loss before the loss occurs. This can be problematic because it will normally require the creation of replacement habitats many years in advance of losses. Compensation must therefore “be a proactive policy rather than one designed only to react to proposals resulting in habitat loss”.
- C.57 The general principle of completing compensation before damaging activity proceeds may need to be tempered by an ability to adapt the compensation provision in light of emerging clarity over time about the true long-term nature of the impacts of the loss. This will especially be the case where the need to compensate has arisen specifically because the adverse impact identified relates to exacerbating risks and uncertainties.

Compensating “like with like”

- C.58 Parties have emphasized that it is preferable to compensate for wetland loss with wetlands of a similar type and in the same local water catchment (see Resolution VII.24 and the annex to Res. VIII.20). Res. VIII.20 advises taking into account the relevance of the compensatory measure to the ecological character, habitat, or value of the affected Ramsar site(s).

- C.59 Compensation systems tend to follow an assumption that in theory, with enough money and technology, in principle ecosystem functionality may be reproduced. The debate in a given case then tends to revolve around proportionality/cost-effectiveness and standards of precision or certainty for such “fixes”. It is important however not to overlook the range of values making up the ecological character of the wetland. Given that this character has been defined under the Convention by reference *inter alia* to ecosystem benefits/services (Res. IX.1 Annex A), in a given case this may include a range of less visible or intangible values that may be lost if the original wetland is lost. These must also be taken into account.
- C.60 Equivalence should also be considered in terms of the protection status of the compensation area. Article 4.2 refers to “in particular ... additional nature reserves”, and the assumption must be that loss of internationally important wetland areas requires compensation by areas which would similarly qualify for (and should be protected by) Ramsar listing. This may involve creation of a new wetland which becomes a new Ramsar site; but it may in some cases involve the extension of an existing Ramsar site. (Indeed this may sometimes be the best way of replacing “like with like”.

On-site versus off-site compensation

- C.61 In some instances a case is made for preferring on-site (or *in situ*) compensation, in the interests of observing the “like-for-like” aspect mentioned above. This however is more often relevant to mitigation (reducing/repairing impact) than compensation *per se*. Generally speaking, on-site benefits, where there is scope to achieve them, are likely to be embraced by management goals already established for the site, rather than being able to be counted towards the off-setting of an undesirable change (see under “already-planned benefits” below).
- C.62 There may be a role in certain circumstances for within-site habitat enhancement as part of a hierarchical approach, subject to the requisite proof that more desirable solutions are not practicable.
- C.63 Otherwise the general principle should be not to draw upon the capacities of a designated site in order to offset or justify damage to other parts of that site. At its worst this could place reliance on a smaller and smaller (and more and more relatively vulnerable) sample of wetland area to support the values the Convention seeks to conserve. If there are desirable and worthwhile conservation aims which draw on the capacity of the site, these should be built into the management objectives set for it, rather than having to wait to be “bought” at the price of damage to some other part of it. The annex to Resolution XI.9 states that compensation for post-mitigation residual impacts should be *ex situ* (ie off-site).

Already-planned or already-required benefits cannot constitute compensation

- C.64 According to the annex to Res. XI.9, relying on an already-planned benefit can not constitute compensation. Measures required for the ‘normal’ implementation of the Ramsar Convention can not be considered compensatory for a damaging project. Anything foreshadowed in a management plan or a restoration plan should therefore be excluded from the compensation equation. Gains that would have happened in any case are

part of the overall stock of value from which something is being lost, hence they cannot be “double-counted” as compensation for that loss.

- C.65 The Resolution also makes clear that merely increasing statutory protection for another wetland, while not expressly excluded by the terms of Article 4.2, should generally be considered a less appropriate option. In particular if a site meets the Ramsar criteria it should be designated irrespective of any compensation process, and on the same basis as the examples in the preceding paragraph, logically it should not be counted as part of any new offsetting benefit.

Scale of compensation; confidence and uncertainty

- C.66 In referring to compensation for cases where sites or parts of sites irrecoverably lose their interest for reasons other than urgent national interest, the Annex to Resolution IX.6 (2005) interprets the reference in Res. VIII.20 to compensation aiming at “the maintenance of the overall value of the Contracting Party’s wetland area included in the Ramsar List” to mean that “at least equivalent provision of compensation should be made”.
- C.67 This must be an absolute minimum expectation. Generally speaking, compensation should address uncertainty. Because scientific knowledge is not absolute, and most compensatory measures are essentially experimental, there exist certain risks in restoring, replacing or enhancing wetlands. There are always risks concerning eco-hydrological viability, and risks that artificially provided habitat will be of poorer quality than the natural habitat it is meant to replace. The greater the value, complexity and size of the wetland that is lost or degraded, the more area should be provided as insurance, and the greater the margin for error that should be anticipated.
- C.68 One obvious way of building in such margins is to provide compensatory areas that are much larger than the areas to be lost. In one of the first cases where compensation for loss of part of a Ramsar site was attempted, in Belgium in 1988, loss of 27.8 hectares from the Galgenschoor Ramsar site was compensated by extending the Blankaart nature reserve by some 2,000 hectares (a ratio of 72:1).
- C.69 Providing for compensation may usefully be approached as a process of “risk management”, aiming as diligently as possible to identify, characterise, assess and minimise risk; and to identify contingency measures that can be taken if assumptions turn out to be incorrect, or if expected outcomes do not materialise.
- C.70 Resolution VIII.20 highlights the need to take scientific and other uncertainties into account. This is linked to the point made earlier about needing time to verify whether the compensation is functioning as planned, before completing the damage that it is intended to offset.
- C.71 In addition, the annex to Res. XI.9 points out that the ability to ensure that the necessary technical, financial, management and legislative capabilities will exist into the future needs to be considered with sufficient care and consideration. If uncertainty about long-term success of the compensation is too high, decision-making on the proposal may need to revert to the “avoid” step in the sequence (i.e. avoiding the activity that made compensation necessary in the first place).

Potential unwanted impacts of the compensation itself

- C.72 Resolution VIII.20 highlights the need to take into account the adverse effect the compensatory measure itself may cause. Such measures should not cause environmental harm, and they should be assessed for their potential environmental impact. Ramsar guidance on environmental impact assessment (Resolution X.17) is likely to be relevant.
- C.73 Proposals for compensation under Article 4.2 (i.e. where Article 2.5 is being invoked) will normally need to be communicated to a variety of types of consultees before becoming finalised. In most cases it would be advisable for the STRP to be included in this so that it may advise, including on potential negative impacts.

Setting goals and judging effectiveness

- C.74 Objectives for each instance of compensation must be set. Obviously these must relate to the lost wetland values, in the context of the description of ecological character defined for the site, and of objectives defined in any management plan.
- C.75 Individual Ramsar sites also play a role in contributing to the overall coherence of the Ramsar List, for example in terms of strategic aims for representativity, viability of supported biodiversity populations and functional connectivity in the landscape. (See for example the Strategic Framework and guidelines for the future development of the List of Wetlands of International Importance, annexed to Res. XI.8).
- C.76 Assessment of compensation proposals may therefore need to consider both an assessment against the site damaged, and an assessment of how the compensation contributes to the coherence of the network. Resolution VIII.20 highlights the need to take into account “the maintenance of the overall value of the Contracting Party’s wetland area included in the Ramsar List at the national and global level”.
- C.77 The same principle is mirrored in the European Union’s Directive on Habitats, under Article 6.4 of which “if, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest [...], the Member State shall take all compensatory measures necessary to ensure that the overall coherence of [the EU protected areas network] is protected”.

Applying Article 4.2 to sites that never met the criteria

- C.78 As recalled in the Framework annexed to Res. XI.9, another (albeit rare) scenario in which compensation is necessary for a Ramsar Site may occur when (in accordance with Res. 5.3), it is agreed between the Convention Secretariat and the Contracting Party concerned that a site failed at the time of designation to qualify under any of the criteria, and that there is no possibility of extension, enhancement, or restoration of its functions or values. In such cases Res. 5.3 provides for removal of the site from the Ramsar List and for the application of “the provisions for compensation, as provided in Article 4.2”.

Compensation where no de-listing or boundary restriction is contemplated

- C.79 If irreversible negative ecological character changes to a Ramsar Site will occur or have already occurred, but Article 2.5 has not been invoked because no decision is being taken to delete or restrict the boundaries of the designated area, the Convention text does not expressly require compensation.
- C.80 In such cases, Resolution VII.24 on “Compensation for lost wetland habitats and other functions” becomes the primary source of an expectation that compensation should be provided. The Resolution urges Parties “to take all practicable measures for compensating any loss of wetland functions, attributes and values, both in quality and surface area, caused by human activities”, and calls for rules for compensation of wetland loss to be integrated into national policies on land and water planning.
- C.81 Resolution IX.6 goes further by saying (referring to the approach taken in Res. 5.3, as mentioned above) that in cases of unavoidable loss of ecological character other than those covered by Art 4.2, “at least equivalent provision” (i.e. to that provided by Art 4.2) should be made.

Annex D

The Montreux Record: Key aspects of existing guidance and interpretations

- D.1 The Montreux Record arose from the wish of Contracting Parties to ensure that two of the fundamental undertakings accepted in the Convention (maintaining the ecological character of wetlands designated for the Ramsar List, and informing the Ramsar Secretariat of any actual or potential changes in this ecological character) were being fulfilled. The Record is designed to list Ramsar sites where changes in ecological character have occurred, are occurring or are likely to occur, and was established by the Parties in COP Recommendation 4.8 (1990). It is maintained by the Secretariat in consultation with the Parties whose sites are included.
- D.2 Recommendation 4.8 instructed the Secretariat to make a distinction in the Record between sites where preventive or remedial action had already been identified or initiated, and those where it had not. In Resolution 5.4 (1993) the Parties established guidelines for the operation of the Record and determined that its purpose should be, *inter alia*, to identify priority sites for positive national and international conservation attention, including the allocation of resources available under relevant financial mechanisms. (Rec. 4.8 had already advised that sites on the Record should be regarded as priorities for the application of what later became known as Ramsar Advisory Missions).
- D.3 The term “record” was carefully chosen (avoiding negative terms such as “sites at risk”) to reflect this positive intent. Listing in the Record is not predicated on an alleged breach or potential breach of the Convention’s requirements, but rather on an issue of ecological change where help or advice may be required.
- D.4 Resolution VI.1 (1996) reaffirmed the idea that the Montreux Record is “the principal tool of the Convention for highlighting those sites where an adverse change in ecological character has occurred, is occurring, or is likely to occur, and which are therefore in need of priority conservation attention”. A revised procedure for its operation was adopted in an Annex to the Resolution.
- D.5 Under this procedure, a Contracting Party may request inclusion of a site in the Record, based on potential or actual adverse change in a Ramsar site’s ecological character, in order to draw attention to the need for action or support. Alternatively the Secretariat, on receipt of information from other sources (which it will pass to the Party concerned) about actual or possible adverse change, may ask the Party whether the site should be included in the Record. A site can only be included with the approval of the Contracting Party concerned.
- D.6 A questionnaire is provided to help the Party summarise relevant information which may help in deciding whether to list the site in the Record, and it includes the following items (those marked with an asterisk should be completed in every case):
- Name of site*
 - Ramsar criteria for listing the site as internationally important*

- Nature of the change in ecological character/potential for adverse change*
 - Reason(s) for adverse change, or potential adverse change, in ecological character*
 - Date of submission of Ramsar Information Sheet (RIS)
 - Date and source of RIS updates (e.g. National Reports, national wetland inventory, specific survey)
 - Benefits and values derived from the site
 - Extent to which values and benefits derived from the site have decreased or changed
 - Monitoring programme in place at the site, if any (technique(s), objectives, and nature of data and information gathered)
 - Assessment procedures in place, if any (how is the information obtained from the monitoring programme used?)
 - Ameliorative and restoration measures in place or planned (if any) so far
 - List of attachments provided by the Contracting Party (if applicable)
 - List of attachments provided by the Ramsar Secretariat (if applicable).
- D.7 The Ramsar Scientific & Technical Review Panel is charged by Res. 5.4 with providing advice on the maintenance of the Montreux Record and on matters relating to the conservation of sites included in it. Under the Res. VI.1 procedure, the Panel (with the agreement of the Party concerned) receives the completed questionnaire from the Secretariat and is invited to comment and give advice. If information was originally received from a source other than the Party itself, provided the Party agrees, the questionnaire is also copied to that original source.
- D.8 The Secretariat will then discuss the STRP's comments and advice with the Contracting Party concerned, with the aim of determining what steps might be taken, including a decision as to whether the site should be included in the Montreux Record.
- D.9 Once a site is included, the Party concerned is expected to provide a report to the Secretariat on the site's conservation status, supplemented by further information if necessary. The guidance annexed to Res. VI.1 linked this to triennial National Reports, but Res. 5.4 (paragraph 5), which remains in effect, specified that reports on Montreux Record sites should be made annually.
- D.10 Provision is made for removal of sites from the Montreux Record at the request of the Party in whose territory the site occurs, or if information is received from other sources suggesting that there is no longer a risk of change in the site's ecological character. While there are no criteria as such for removing sites from the Record, questions to help in making such a decision are provided in another questionnaire, which includes the following:
- Success of ameliorative, restoration or maintenance measures
 - Proposed monitoring and assessment procedures
 - Extent to which the ecological character, benefits and values of the site have been restored or maintained (provide details)
 - Rationale for removing the site from the Montreux Record (refer to the guidelines for operation of the Record and the information provided in the initial inclusion questionnaire)

- List of further attachments (if applicable).
- D.11 As before, the information provided in response to this second questionnaire is passed to the STRP to enable the Panel to advise. In 1999 the Panel decided that it would set up a sub-group on each occasion that a removal is proposed, to review the proposal. The Panel may request further information. If invited by the Contracting Party, the Secretariat may organise a site visit; and a representative of the STRP and/or other experts may be involved in such a visit.
- D.12 Sites are removed from the Montreux Record based on the request of the Contracting Party, after consideration of advice and/or comment from the STRP, and “upon receipt of documents detailing either the remedial actions implemented successfully at the site, or the reasons why the ecological character of the site is no longer likely to change” (Res. 5.4). The final decision to remove a site is made by the Contracting Party. The Secretariat will, unless the Contracting Party concerned objects, provide information on the decision made by the Party to other interested bodies.
- D.13 A further provision made in the Annex to Res. VI.1 was for the Montreux Record to be maintained as part of the Ramsar Database, and to be “subject to continuous review”.
- D.14 COP Resolution VIII.8 on “Assessing and reporting the status and trends of wetlands, and the implementation of Article 3.2 of the Convention” (2002) reaffirmed the purpose of the Montreux Record as it had been defined at COPs 5 and 6, and elaborated this further by describing voluntary inclusion of sites on the Record as useful for Contracting Parties in circumstances where:
- (a) demonstrating national commitment to resolve the adverse changes would assist in the resolution of those changes;
 - (b) highlighting particularly serious cases would be beneficial at national and/or international level;
 - (c) positive national and international conservation attention would benefit the site; and/or
 - (d) inclusion on the Record would provide guidance in the allocation of resources available under financial mechanisms.
- D.15 The Resolution encourages Parties, when submitting a report under Article 3.2, to consider whether the site concerned would benefit from listing on the Montreux Record, and to request such listing as appropriate.
- D.16 Res. VIII.8 makes more explicit than before the distinction between the role of the Montreux Record in reporting and addressing adverse change and potential change in Ramsar site ecological character through the identification of “priority sites for positive national and international conservation attention” on the one hand, and the role of reporting all such change under Article 3.2 of the Convention on the other. The Record, on this view, is therefore not seen as purporting to be a comprehensive list of sites in such condition, but merely those chosen at the discretion of Parties for particular attention in this way. The continuing obligation to report all instances under Article 3.2 remains unaffected; hence there should be a comprehensive list *as well* as the selective list.

- D.17 The COP also requested Parties with sites on the Montreux Record to provide the Ramsar Secretariat with regular updates on the progress made in taking action to address the issues for which the sites were listed on the Record, including reporting fully on these matters in National Reports to each meeting of the COP (hence clarifying that *both* of the update/outcome reporting expectations expressed in Rec. 4.8 and Res. 5.4 respectively, apply).
- D.18 If these reporting provisions were well followed, as COP10 document Doc. 27 (2008) has pointed out, the Montreux Record, as well as being a catalyst for action, might also be considered as a mechanism for generating good case-study information on lessons learned in successfully tackling threats to Ramsar sites.

Annex E

The Ramsar Advisory Missions process: Key aspects of existing guidance and interpretations

- E.1 Although the Ramsar Convention contains a strict obligation for Contracting Parties to arrange to be informed about change or likely change in ecological character affecting Listed sites, and to pass information on such changes without delay to the Secretariat (Article 3.2), there is no equivalent obligation concerning what to do about the change itself (apart of course from the general requirement in Article 3.1 to formulate and implement planning so as to promote the conservation of sites in the List, and the requirement in Art. 4.2 to compensate for the extreme event of restriction or deletion of such sites).
- E.2 There are however a number of suggestions and exhortations contained in COP decisions that offer help. One is the Ramsar Advisory Missions.
- E.3 The original decision to create the Missions procedure was made by the Standing Committee in 1988 and later endorsed by the COP in 1990 in Recommendation 4.7. The system was originally named the "Monitoring Procedure", then later (through paragraph 14 of Resolution VI.14 in 1996) the "Management Guidance Procedure", and finally (through paragraph 39 of Resolution VII.12 in 1999) the "Ramsar Advisory Missions".
- E.4 The procedure is (briefly) described in the annex to Rec. 4.7. It is triggered by the Ramsar Secretariat becoming aware (by any means, since this is not specified) that the ecological character of a Ramsar site is changing or is likely to change as a result of human activity. The Secretariat can then propose to the Contracting Party concerned that the RAM procedure be activated.
- E.5 Both are then expected to collaborate to arrive at an acceptable solution to the problem facing the site, and the Secretariat may offer advice and assistance to this end. If it does not appear that an acceptable solution can be readily achieved, the Standing Committee should be informed, and the Committee itself may pursue appropriate ways of helping with the matter.
- E.6 Resolution VIII.8 (2002) and COP10 document Doc. 27 (2008) have described RAMs as a mechanism for bringing international expert advice and assistance to bear on ecological character change issues. The expertise contributed is sometimes the decisive added value required to find a solution. On other occasions the independent authoritative "brokerage" provided through a RAM can break political deadlock and may be decisive in creating consensus.
- E.7 Successive Ramsar Strategic Plans have highlighted the importance of the mechanism, encouraging its increased application and diligent implementation of resulting recommendations. The second and third Plans (2003–2008 and 2009–2015 respectively) have sought the activation of a RAM for every site listed in the Montreux Record (see Annex D above).

- E.8 No other formal guidance on the process has been adopted by the COP, and it thus remains governed by the original brief parameters set out in the annex to Rec. 4.7. This means that RAM reports themselves (over 70 completed to date) are a valuable guide to evolving practice and the approaches that have been followed.
- E.9 Rec. 4.7 determined that RAM reports will be public documents, once the Contracting Party concerned has had an opportunity to comment on them (i.e. in practice to comment on a pre-final draft). Final versions are published on the Ramsar website (usually in only one of the Convention languages). In addition to illuminating the RAM processes and methods, these reports are a rich source of problem-solving case experience for the Convention as a whole.
- E.10 The process also requires the Secretariat periodically to “review and report progress on the conservation status of sites to which its attention has been drawn under this procedure” (i.e. strictly speaking not only those instances which led to an actual Mission). Where the outcome involves a change in ecological character of the site, the Secretariat is expected to circulate information on this for discussion at the next meeting of the COP, in accordance with Article 8.2 (d) of the Convention.

Annex F

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