

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES  
OF WILD FAUNA AND FLORA

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GUIDANCE ON THE PREPARATION AND REVIEW OF CITES PROPOSALS THAT INVOLVE  
PROJECTION OF SPECIES TRENDS IN THE FUTURE

This document has been submitted by Canada on the behalf of TRAFFIC\* in relation to agenda item 88 on proposals to Amend Appendices I and II. It was prepared by TRAFFIC under contract to Environment and Climate Change Canada.

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**Guidance on the preparation and review of CITES proposals that involve projections of species trends in the future.**

**Prepared by TRAFFIC**

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## **1. Introduction**

The aim of CITES is to ensure that international trade in wild animals and plant species does not threaten their survival. It does this by regulating trade of species included in its Appendices, chiefly Appendix I and Appendix II. Specimens of species included in Appendix I are subject to particularly strict regulation of international trade; those of species included in Appendix II are subject to less strict regulation, although Parties to the Convention must be satisfied that harvest for trade does not pose a risk to the survival of the species concerned. Appendix I and II are modified through agreement of the Conference of the Parties (CoP). In order to help the Parties decide which species should be included in which Appendix, the CoP has adopted a series of Resolutions containing criteria and guidelines for amending the Appendices, most recently Resolution Conf. 9.24 (revised CoP16). These guidelines discuss both biological and trade criteria. Among the biological criteria, reference is made in several places to future declines. It is not always completely clear how these references should be interpreted in applying the criteria. This paper looks at these references and makes suggestions as to how they might be interpreted and applied to ensure that decisions made in amending the Appendices best help to meet the aim of the Convention.

### **1.1 The Convention and its decision-making processes**

#### **1.1.1 The purpose of the Convention and its Appendices**

The aim of CITES is to ensure that international trade in wild animal and plant species does not threaten their survival and it does this by regulation of international trade in animal and plant specimens. Species subject to regulation are included in one of the Appendices to the Convention (only Appendices I and II are considered here).

Under the Convention, Appendix I is intended to include: “all species threatened with extinction which are or may be affected by trade. Trade in specimens of these species must be subject to particularly strict regulation in order not to endanger further their survival and must only be authorized in exceptional circumstances” (Article II, para 1).

Species that are included in Appendix II fall into two categories: those which, although not necessarily threatened with extinction, may become so unless trade in specimens is subject to strict regulation in order to avoid utilization incompatible with their survival; species included because regulation of trade in specimens of these species is thought necessary to ensure that trade in specimens of species in the first category may be brought under effective control (Article II, paragraph 2). This discussion confines itself to species in the first of these categories – that is, it excludes so-called lookalike species.

The text of the Convention is clear in its intention. However, it does not offer definitions of some important terms included in it, notably “endangered” and “are or may be affected by trade” (Article II paragraph 1, referring to Appendix I), and “threatened with extinction” (Article II, paragraph 2, referring to Appendix II).

### **1.1.2 CITES and its relationship with domestic legislation, management and use of species**

Under the Convention, “trade” means international trade (defined in Article I as “export, re-export, import and introduction from the sea”). CITES has no role in the domestic management of species, other than in the impact of the latter on harvesting of the species for international trade. That is, the Convention recognizes the sovereignty of countries in dealing with their own populations of species. Species included in Appendix I, for example, may not be protected at all within some range States, allowing harvest for domestic consumption to take place in an uncontrolled way.

### **1.1.3. The decision-making context of the Convention**

The Conference of the Parties (CoP), comprising the governments of all the Parties to the Convention (180 as of February 2014), is the ruling body of the Convention. Its decisions are final (which does not mean irreversible) – there is no higher authority under the Convention than the CoP. Amongst much else, the CoP decides on changes to Appendix I and Appendix II on the basis of proposals made by one or more Parties; if the CoP agrees to a proposal, the Appendices are amended accordingly. In theory, Parties can propose amendments to these Appendices, and the CoP can agree to them at any time through a remote decision-making process (set out in Article XV paragraph 2). In practice such changes are only agreed at the periodic meetings of the CoP. There have been 16 CoPs to date with, currently, roughly three years between meetings.

In the time since the Convention came into force (in 1975) the CoP has made many changes in the way that the Convention is interpreted and implemented. These are elaborated in Resolutions and Decisions of the CoP. In the history of the Convention a number of different Resolutions have been adopted to help the Parties in deciding how to amend the Appendices. The Resolution currently operating is a revision of Resolution Conf. 9.24.

### **1.1.4. Types of Amendments to Appendix I and II**

Changes to listings in the Appendices entail either increasing or decreasing levels of regulation. Increasing regulation can be: inclusion of a species not currently listed in the Appendices (excluding Appendix III) in Appendix I; inclusion of such a species in Appendix II; transfer of a species currently listed in Appendix II to Appendix I.

Decreasing regulation entails transferring a species from Appendix I to Appendix II or deleting a species from the Appendices, almost always from Appendix II as species are only deleted from Appendix I in exceptional circumstances.

### **1.2.1 History and context prior to the development of Resolution Conf. 9.24 Criteria for amendment of Appendices I and II**

Some 1100 species were included in the Appendices when the Convention first came into force and before any criteria had been established. Among these were species included in Appendix I simply because they were considered threatened with extinction (or in some cases possibly extinct) or were

protected species under national legislation, regardless of whether they featured in international trade, or whether such trade might plausibly pose a threat to them.

It was apparent to the CoP that some agreed criteria needed to be established to help the CoP decide which species should be included in the Appendices. Accordingly, at its first meeting, the CoP adopted the Bern Criteria. These provided guidance as to the kinds of information to be used in determining whether species were threatened, but did not define the terms “endangered” or “threatened with extinction”.

Regarding the term “are or may be affected by trade”, under the Bern Criteria adopted at CoP1, this was elaborated as meaning: “any species that might be expected to be traded for any purpose, scientific or otherwise.” The Bern Criteria then stated: “Particular attention should be given to any species for which such trade might, over a period of time, involve numbers of specimens constituting a significant portion of the total population size necessary for the continued survival of the species.”

It was quickly realised that, if the primary definition of “are or may be affected by trade” in the Bern Criteria were strictly applied, it might mean that Appendix I would become excessively long. At its second meeting, the CoP, in Resolution Conf. 2.19 (Criteria for Addition of Extremely Rare Species to Appendix I), recommended that the criteria be interpreted as applying where the population of a species in the wild is known to be so low that, if it were to be exploited in any way, it may be exterminated before effective steps could be taken to save it.

It became increasingly apparent throughout the 1980s that the (modified) Bern Criteria were not satisfactory as a basis for deciding which species to include in which Appendix. Accordingly, in the early 1990s the Parties sanctioned the development of a set of criteria to replace the Bern Criteria focussing particularly on guidelines for assessing the conservation status of species, that is elaborating on the terms “endangered” and “threatened with extinction”.

### **1.2.2 The IUCN Red List criteria**

The work in the 1990s in CITES to develop a set of criteria including species on CITES initially drew on a parallel process being undertaken by IUCN to develop criteria for identifying and classifying threatened species for the IUCN Red List of Threatened Species, although continued finalising of the two sets of criteria was independent.

Until the 1990s, the IUCN Red List used categories developed in the 1960s to convey the perceived threat of extinction of a given species (Extinct, Endangered, Vulnerable, Rare, Indeterminate, Out of Danger and Insufficiently Known). These had brief, clear, verbal definitions but were essentially qualitative: no numerical guidelines or thresholds were attached to them. They were therefore open to potentially widely different interpretations depending on who was applying them.

To try to overcome this, IUCN developed a set of quantitative criteria intended to be applicable to a wide range of taxa based essentially on three biological parameters: population size; range size; and population trend, also taking into account life history parameters, more specific information on population sizes and trends, distribution and known or likely threats. It was intended that all species could be classified using available information into one of a number of categories of perceived extinction risk or status. The current categories are: Extinct; Extinct in the Wild; Critically Endangered; Endangered;

Vulnerable; Near-threatened; Least Concern; Data Deficient, with all remaining species not evaluated. Of these, Critically Endangered, Endangered and Vulnerable are together taken to constitute “threatened”.

The IUCN criteria<sup>1</sup> refer repeatedly to “observed, estimated, inferred or projected” changes in population size and geographic range. They provide quantitative thresholds (e.g. “a population size estimated to number fewer than 250 mature individuals automatically qualifies a species as Endangered, while fewer than 50 qualifies as Critically Endangered”) and provide for future reductions not necessarily extrapolated from recent or ongoing reductions (e.g. for Critically Endangered: “a population size reduction of  $\geq 80\%$ , projected or suspected to be met within the next 10 years or three generations, whichever is the longer, up to a maximum of 100 years.....”).

They also provide for classification based on “quantitative analysis showing the probability of extinction in the wild is at least xx% within 10 years or three generations, whichever is the longer (up to a maximum of 100 years)”, with the category assigned depending on the value of xx.

As can be seen, the timeframe for analysis of possible future changes in the IUCN Red List is essentially 10-100 years.

### **1.3. Resolution Conf. 9.24**

The new criteria and guidelines for amending the Appendices were agreed by the CoP at their 9<sup>th</sup> meeting, in 1994, forming Resolution Conf. 9.24. This Resolution has been modified at most subsequent meetings of the CoPs, most substantively at CoP12. The following sections outline the relevant elements of Res. Conf. 9.24 (CoP16) as they pertain to evaluation of future trends for species, with reference to earlier versions of the Resolution.

#### **1.3.1 Criteria for inclusion in Appendix I**

Resolution Conf. 9.24 explicitly recognizes that for a species to be included in Appendix I it needs to meet **both** biological and trade criteria.

**1.3.1.1 Biological criteria** for inclusion of species in Appendix I – essentially an elaborated definition of “endangered” under CITES - are included in Annex 1 of the Resolution. The biological criteria allow for consideration of various factors that contribute to risk of extinction. The various factors include, among others, a small population size with the possibility of a projected decline; restricted area of distribution with the possibility of projected decrease; and a marked decline, either observed as ongoing or having occurred, or inferred or projected on the basis of decrease in area or quality of habitat, levels or patterns of exploitation, high vulnerability or decreasing recruitment. These biological criteria, therefore, can in theory be met on the basis of projected declines (i.e. declines not necessarily currently taking place), which may be based on a variety of factors.

The biological criteria have remained essentially unchanged since they were first introduced at CoP9, with some modifications to the precise wording. However, the original Annex also included one further

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2001 IUCN Red List Categories and Criteria version 3.1 [http://jr.iucnredlist.org/documents/redlist\\_cats\\_crit\\_en.pdf](http://jr.iucnredlist.org/documents/redlist_cats_crit_en.pdf)

criterion, “The status of the species is such that if the species is not included in Appendix I, it is likely to satisfy one or more of the above criteria within a period of five years” which was removed with the revisions made at CoP12.

Annex 1, deliberately, is not quantitative. Annex 5 of the Resolution (Definitions, explanations and guidelines) includes numerical guidelines but stresses that “they are presented only as examples, since it is impossible to give numerical values that are applicable to all taxa...” Figures cited are therefore not thresholds: this is a crucial difference between the criteria in this Resolution and the IUCN criteria for threatened species.

Annex 5 provides guidance for assessing declines that are historical, recent or ongoing, or for projected future declines that can be inferred from these. Specifically, the Annex includes guidance for **marked** historical declines (citing declines of to 5%-30% of baseline, as guidelines) and **marked** recent rates of decline (percentage decline of 50% or more in the last 10 years or three generations, whichever is longer, or for a small population, 20% or more decline in the last 5 years or two generations, whichever is longer). (The guidelines are somewhat narrower for application of extent of decline for commercially exploited aquatic species.)

Annex 5 does not, however, provide any guidelines for assessing projected declines that are not based on historical, recent or ongoing declines. All it has to say on such declines is “Projection involves extrapolation to infer likely future values.” There is no additional guidance for assessing projected declines that have not yet occurred or started to occur.

Similarly there is no guidance on the extent of declines or decreases (or the time period over which to assess them) where a species’ wild population is small or has a restricted area of distribution.

**1.3.1.2 Trade criteria** for inclusion in Appendix I were originally included in the operational part of Resolution Conf. 9.24 where it was stated that a species “is or may be affected by trade” if: “i) it is known to be in trade; or ii) it is probably in trade, but conclusive evidence is lacking; or iii) there is potential international demand for specimens; or iv) it would probably enter trade were it not subject to Appendix-I controls.” This is extremely broad, and quite close to the original definition given in the Bern Criteria at CoP1.

At CoP12 a definition was provided in Annex 5 that is still used today. The definition qualifies the meaning of affected by trade as: a species “is or may be affected by trade” if: “it is known to be in trade (...), and that trade has or may have a detrimental impact on the status of the species; or it is suspected to be in trade, or there is demonstrable international demand for the species, that may be detrimental to its survival in the wild”. The emphasis here is on trade that has or may have a *detrimental impact on the species*. A species in trade for which there are very low levels of trade, no commercial trade, and no anticipated demand might not be considered to be affected by trade because there is not or will not be a detrimental impact on the species. In contrast, a commercially harvested wild species would almost certainly be considered affected by trade. Notably, “affected by trade” does not necessarily mean that the species in question is currently adversely affected by trade, merely that there is the potential for adverse impact. Thus, even if the commercially harvested species were sustainably and adaptively managed, it could be considered affected by trade because of the potential for adverse impact. Many other situations will be between these extremes, requiring a judgement call as to whether the species can be considered “affected by trade” as defined under the resolution.

### **1.3.2 Criteria for inclusion in Appendix II (excluding “lookalike” criteria)**

As would be expected from the wording and intent of the Convention, the criteria for inclusion in Appendix II in Resolution Conf. 9.24 as revised at CoP12 (set out in Annex 2 a) are broader than those for inclusion in Appendix I. As for Appendix I criteria, they allow consideration of future species trends.

The Appendix II criteria indicate that a species should be included in Appendix II if it is known, or can be inferred or projected, that the regulation of trade in the species is either “necessary to avoid it becoming eligible for inclusion in Appendix I in the near future” (para A) or “to ensure that the harvest of specimens from the wild is not reducing the wild population to a level at which its survival might be threatened by continued harvesting or other influences” (para B). Regarding the definition of “Near future”, in Annex 5 it is stated that “this will be taxon- and case-specific but should be greater than 5 years and less than 10 years.” This is one of the very few places in the Resolution that a time-frame is given as definitive, rather than as an indicative guideline. This would apply to any of the biological criteria for Appendix I including declines.

There has been considerable debate concerning the degree to which paragraphs A and B are equivalent, and particularly consideration of the time frames associated with future trends for a species. If “survival might be threatened” in paragraph B of Annex 2a above is taken as equivalent to “threatened with extinction” as used in Article II of the Convention, then in our view this paragraph can be interpreted as a paraphrase of paragraph A, but without the reference to the near future. As such, paragraph B could be interpreted as indicating that a longer (unspecified) time-frame can be applied in this case. (The original version of Resolution Conf. 9.24 referred to harvest “exceeding, over an extended period, the level that can be continued in perpetuity;” but this was deleted at CoP12).

Regarding listing of commercially exploited aquatic species in Appendix II, the footnote in Annex 5 indicates that an appropriate recent decline would be one in which a species would be projected to meet Appendix-I-extent-of-decline guidelines within approximately a ten-year period. This latter is essentially a reiteration of paragraph A of Annex 2a. The extent to which this footnote is intended to apply to paragraph B of Annex 2a is controversial (see <http://www.cites.org/eng/cop/15/doc/E15-63.pdf> and <http://www.cites.org/eng/com/ac/25/E25-10.pdf>). In our interpretation, as discussed in detail in the latter document, the footnote only applies to paragraph A, so that paragraph B is not affected by the more restrictive guidelines for historical or recent declines as set out in that paragraph. In any event, this footnote only refers to projected future declines that are inferred from historical, recent or ongoing declines: as with the remainder of the Resolution, the footnote has nothing substantive to say about projected declines that are not based on historical, recent or ongoing declines.

Regardless of the precise application of this footnote, the focus for inclusion in Appendix II remains on the perceived need to regulate trade (and harvest for trade) to prevent a species becoming threatened with extinction. That is, there is a need to demonstrate that harvest for trade, unless regulated under the Convention, will have a significant impact on the conservation status of the species.

## **2. Discussion and Recommendations**

It is helpful to examine the various different kinds of amendment proposal separately, as different criteria apply for Appendix I and Appendix II.

Although the same considerations apply when assessing a proposal that has already been submitted as they do when contemplating the preparation of a proposal, for simplicity of presentation, the following discussion is couched in terms of assessing rather than preparing proposals.

## 2.1. Appendix II

### **Assessing proposals to include unlisted species in Appendix II when there is a projected decline**

The sustainability or otherwise of harvest for trade is a crucial factor in assessing all proposals (other than for 'lookalike' species) for inclusion of unlisted species in Appendix II.

When **current harvest for trade is agreed not to be sustainable**, there would normally be good reason to support inclusion in Appendix II for a species with a projected decline. The species would be argued as appearing to meet the criteria in Annex 2aA if, overall, the projected declines were of a degree indicating that the species might be eligible for inclusion in Appendix I in the near future (5 to 10 years) unless trade was regulated. The criteria in Annex 2aB could be argued to be likely to apply (the footnote in Annex 5 of the current revision of Resolution Conf. 9.24 notwithstanding) if the declines were projected to be taking place somewhat longer into the future.

When current **harvest for trade is agreed to be sustainable**, for the species to meet the criteria for inclusion in Appendix II, it would need to be argued that a future population decline were projected to be marked and in the near future (within 5-10 years) and that harvesting would be unlikely to continue to be sustainable in the face of such a decline. Such a situation could occur, for example, when harvest was not actively managed, but was currently at a low enough level that it did not have a significant impact on the population in question, but that this same level of harvest might have an impact if the species were to decline for other reasons (such as habitat loss). In this instance the species would appear to meet the criteria in Annex 2aA of the current revision of Resolution Conf. 9.24. Such a situation would not be expected to occur when harvest was adaptively managed.

Both the Convention text and the criteria in the current revision of Resolution Conf. 9.24 are clear that species should be considered for inclusion in Appendix II only if regulation of harvest for trade is necessary to prevent their becoming threatened with extinction. Species for which this is not the case would be generally agreed not to meet the criteria for inclusion in Appendix II, even if their population were projected to decline at some point in the future. If there were some likelihood that the species might become affected by trade in the future and there were projected declines in the future, it could be argued under some interpretations of the precautionary approach that the species would meet the criteria for inclusion in Appendix II (for example, species in groups that have in the past been subject to serial exploitation, with harvest for trade shifting to previously unexploited similar species when primarily exploited species have been depleted). Such cases need to be judged individually, with an assessment of the likelihood of both the projected decline and the harvest for trade manifesting themselves, and a further assessment of the likely impact of harvest for trade on the population.

#### *Recommendations*

*Where the species is agreed not to be sustainably harvested, in general support proposals for inclusion in Appendix II unless there is reason to believe that a sustainable harvest regime will be introduced in the absence of listing well before the species becomes eligible for inclusion in Appendix I.*

*Where the species in question is agreed to be sustainably harvested, in general do not support proposals for inclusion in Appendix II unless a decline is projected to be marked and in the near future (within 5-10 years) and there is reason to believe that management will not adapt to this change.*

*Where the species is agreed not to be significantly affected by trade, in general do not support proposals for inclusion in Appendix II unless there is reason to believe that the species might become affected by trade in the future, and that harvest for trade is likely to be unsustainable.*

## **2.2. Assessing proposals to include species in Appendix I when there is a projected decline**

Species may be proposed for inclusion in Appendix I that are either currently unlisted (or listed only in Appendix III) or that are already included in Appendix II. The criteria to be used in assessing proposals in either case are the same, as set out in the relevant parts of Resolution Conf. 9.24. However, in practice the two cases need to be approached differently. In the case of a currently unlisted species, Parties may decide: to support the proposal for inclusion in Appendix I; to support a modified proposal to include the species in Appendix II rather than Appendix I (such a modification is permitted under the rules of procedure for the CoP: Rule 22 (2) and Rule 23 (5) allow for reduction of the scope of a proposal); not to support any listing at all. In assessing such proposals, therefore, Parties need to decide which Appendix, if either, is the most appropriate for the species to be included in. In the latter case the species is already included in Appendix II and subject to the regulations for such species laid out in the Convention. Parties have the choice of supporting a transfer to Appendix I or supporting the maintenance of the species in Appendix II. In this case the Parties should take into account current management under CITES and determine whether this is effective and, if not, whether there are other steps that could be undertaken to improve management without the need for a change in the listing. This is discussed further below.

### **Projected decline of species affected by trade based on a historical, recent or ongoing decline.**

Where a species is proposed for inclusion in Appendix I and there is a projected decline that is based on a historical, recent or ongoing decline, the guidelines in Annex 5 (including, if appropriate, the footnote) of the current revision of Resolution Conf. 9.24 can be applied. There are two sources of guidance in this Annex for applying declines in the future. One is the time-frame for assessing whether a decline is marked or not ((the last) ten years, or three generations, whichever is longer) and the other is the reference to 'near future' (more than five years and less than ten) in the criteria for inclusion in Appendix II.

Under the latter, a projected marked decline between five and ten years into the future of a species in trade could be taken as meeting the criteria for inclusion in Appendix II, under Annex 2aA of the Resolution, rather than Appendix I, if there were concern that harvest for trade might have an adverse impact. By extension a projected marked decline in the very near future (5 years or less) could be taken as meeting the criteria for inclusion in Appendix I (with wording to this effect included in the original wording to 9.24, but removed in revisions at CoP12). Similarly by extension, a projected marked decline not in the near future (that is more than 10 years into the future) of a species in trade might be taken as meeting, if anything, the criteria for inclusion in Appendix II under Annex 2aB, rather than Appendix I, again only if there were concern that harvest for trade might have an adverse impact.

Where species have a very short generation time (less two years) there is no conflict between applying this interpretation of 'near future' and applying the timeframe for assessing marked declines, because three generations falls roughly within the 5-year period. Thus a marked decline over five years is essentially the same as a marked decline over three generations, qualifying the species for inclusion in Appendix I on both counts. For such a species, a marked decline projected to take place between five

and ten years into the future would qualify the species for inclusion in Appendix II under the criteria in paragraph 2aA (assuming that the decline were trade-related). A decline projected to take place more than ten years into the future for such a species might, arguably, meet the criteria for inclusion in Appendix II under paragraph 2aB, although it might also be argued that the species did not meet the criteria for inclusion in either Appendix.

However, in species with longer generation times there is a problem reconciling the guidelines for assessing declines as marked and the definition of near future as set out in Resolution Conf. 9.24 when marked declines are projected to take place more than five years in the future (for such species, as with species with a very short generation time, a marked decline within five years would clearly qualify the species for inclusion in Appendix I). A species with a generation time of between 2 and 3 years projected to undergo a marked decline between 5 and 10 years in the future could be argued on the one hand as meeting the criteria for inclusion in Appendix I as this was within three generations but on the other as meeting the criteria for inclusion in Appendix II as this was not within the 'near future' as defined in paragraph 2a A of Annex 5 of the Resolution. As with species with very short generation times, a decline projected to take place more than ten years into the future for such a species might, arguably, meet the criteria for inclusion in Appendix II under paragraph 2a B, although it might also be argued that the species did not meet the criteria for inclusion in either Appendix.

For species with generation times longer than 3 years, the divergence between the two sources of guidance is even greater. A species with a generation time of, say, 10 years, projected to decline markedly 20 years in the future might be argued as meeting the criteria for inclusion in Appendix I (as this was within three generations) but as, if anything, meeting the criteria for inclusion in Appendix II under paragraph 2a B or even, as above, not meeting the criteria for inclusion in either Appendix.

There is no completely unequivocal way of reconciling the conclusions that arise from applying the two different sources of guidance. However, the fact that ten years into the future is the maximum time explicitly referred to in the Resolution (in the definition of 'near future' and in the footnote regarding commercially exploited aquatic species) could be taken as indicating that this is the timeframe that Parties regarded as generally useful for assessing potential future circumstances. The Parties might be expected to exercise caution in using longer-term projections as the basis for decision-making, particularly in the case of inclusion in Appendix I, as such a listing essentially forecloses other management options and has proven in practice difficult to reverse. The fact that meetings of the CoP take place every three years or so also means that ten years into the future is a reasonable time to use as the basis for making decisions (were the CoP only to meet every ten or fifteen years, decisions would clearly be made on a very different basis).

An exception to this general approach would apply for species that might be intrinsically highly susceptible to overexploitation, for example through having very low productivity and long generation times. In the most extreme such cases it might be difficult to envisage any sustainable commercial harvest for export, meaning that the species might qualify for inclusion in Appendix I on the basis of a decline projected longer into the future. In less extreme cases, inclusion in Appendix II might be considered a wise precautionary measure.

**Projected decline of species affected by trade that is not based on a historical, recent or ongoing decline.** Interpretation of the Resolution is even more problematic in this case because no guidance at all is provided on what might be regarded as a 'marked' decline in such circumstances. The simplest approach would be to treat such projected declines in the same way as those that are based on recent or ongoing declines, with the caveat that declines projected to take place in the distant future (more than ten

years), not currently manifested, might be regarded as providing somewhat weak support for the inclusion of a species in the Appendices, and particularly in Appendix I.

**Projected decline of species not affected by trade.** A species not now affected by trade and considered unlikely to be so in the future would not appear to meet the criteria for inclusion in Appendix I even if its population were projected to undergo a marked decline in the future.

***Recommendations for assessing proposals to include species in Appendix I on the basis of a projected decline***

*Where the species **is affected by trade**, used the guidelines in Annex 5 of the current revision of Resolution Conf. 9.24 (including the footnote if relevant) to assess whether the decline might be considered marked. If the decline is expected to be marked within the next 5 years, in general support a proposal for inclusion in Appendix I. If the decline is expected to be marked within the next 5-10 years, in general support a proposal for inclusion in Appendix II unless there are good reasons to believe that the species could not sustain any commercial harvest for trade (e.g. long generation time and low productivity) in which case support inclusion in Appendix I.*

*If the decline is expected to be marked within a longer time period, in general support inclusion in Appendix II for species with a generation time of greater than 3 years, if it is believed that harvest for trade will have an adverse impact unless the species is listed. For species with a long generation time and very low productivity, which it is believed could not sustain any commercial harvest for trade and which are likely to be affected by trade, support inclusion in Appendix I.*

*Where a species **is not now affected by trade and is considered unlikely to be so in the future**, do not support proposals to include it in Appendix I or Appendix II.*

**2.2.1 Additional considerations in assessing proposals to include species in Appendix I that are already listed in Appendix II**

Range states have an obligation to ensure that trade in a species that is already listed on Appendix II is not detrimental to the survival of the species--a Non-Detriment Finding—under Article IV of the Convention. Non-detriment findings are expected to take into account all significant factors affecting the species under consideration, including adjustment of management and harvest regimes in light of changing circumstances such as a future decline. Such adjustment would be expected to include severe restrictions on harvest for export (including zero quotas) if it were determined that such harvest were no longer sustainable.

Given a proposal to transfer a species from Appendix II to Appendix I when there is a projected decline, the CoP (generally on the basis of advice from the Scientific Committees) will need to be satisfied that Article IV is being satisfactorily implemented in all range States. If harvest for trade is **managed sustainably and adaptively**, there would appear to be no reason to support a proposal to transfer an Appendix-II listed species to Appendix I.

If there is concern that non-detriment findings might not have been made, or not be fit for purpose, and **harvest for trade might be having a detrimental impact** on the survival of Appendix-II listed species the CoP has mandated a comprehensive process – the Review of Significant Trade. This process, set out in Resolution Conf. 12.8 (Rev CoP13), is coordinated through the Scientific Committees and the Standing Committee. It is an iterative process designed to assist Parties to meet their obligations under Article IV.

In cases where there is evidence that, despite all efforts, exporting States continue not to make satisfactory non-detriment findings and that harvest for export is not in accordance with Article IV, the Standing Committee is mandated to recommend to Parties that they do not accept imports of the species in question from the range State in question until the matter has been resolved. This is a powerful tool in the implementation of the Convention. In cases where a decline were projected to be both marked and rapid, the CoP could adopt a zero export quota while retaining the species in Appendix II, and including it in the Review of Significant Trade, the quota to remain in place until sustainable harvest regimes were put in place.

As with proposals to include currently unlisted species in the Appendices, species that are not affected by trade, and which are believed unlikely to become affected by trade in the future do not meet the criteria for inclusion in Appendix I.

Given the controls on trade in Appendix-II listed species outlined above, there would generally be little justification for supporting a proposal to transfer species from Appendix II to Appendix I unless all measures under Appendix II have failed.

***Additional recommendations for assessing proposals to transfer a species to Appendix I from Appendix II when there is a projected decline***

*Where an Appendix II listed species **is regarded as sustainably harvested** and subject to adaptive management do not support a proposal to transfer it from Appendix II to Appendix I.*

*Where an Appendix II listed species **is regarded as not sustainably harvested**, support inclusion of the species in the Review of Significant Trade process. If the species is projected to undergo a marked and rapid decline, support adoption of a (temporary) zero export quota while retaining the species in Appendix II.*

*Where an Appendix II listed species **is not affected by trade**, do not support a proposal to transfer it from Appendix II to Appendix I.*

**2.3 Assessing proposals for transfer of species from Appendix I to Appendix II and to delete species from Appendix II when there is a projected decline**

Species not affected by trade, and not included because of lookalike criteria, may be proposed for transfer from Appendix I to Appendix II, or for deletion from Appendix II. Such species do not meet the criteria for inclusion in the Appendices, so that in general such proposals can be supported under the terms of the current revision of Resolution Conf. 9.24, provided that the precautionary measures in Annex 4 are applied.

However, in cases where the population is projected to undergo a marked decrease, application of the precautionary measures might counsel against supporting such proposals if it was thought possible that the species might enter trade in the future.

There may be cases where a species affected by trade and projected to undergo a decline is proposed for transfer from Appendix I to Appendix II, or for deletion from Appendix II. This might arise if the species clearly did not meet the criteria for inclusion in that Appendix, because the decline was projected to be very gradual. In the case of an Appendix-I listed species, such a species might be proposed for transfer to Appendix-II, because the more flexible management options offered by Appendix II were considered likely

to be beneficial to conservation efforts to maintain the species. Such cases would need to be decided upon on a case-by-case basis with particular attention paid to the precautionary measures in Annex 4.

*Recommendations*

*In general support proposals for species **that are not affected by trade, and unlikely to become so**, with due consideration of the precautionary measures in Annex 4 of the current revision of Resolution Conf. 9.24.*

*Assess proposals for species **that are affected by trade** on a case-by-case basis, paying particular attention to the precautionary measures in Annex 4 of the current revision of Resolution Conf. 9.24 and to the conservation benefits that might be expected to ensue.*

**Appendix 1- Criteria for inclusion in Appendix I and II – extract from Resolution Conf. 9.24  
(Rev CoP16).**

**Annex 1 Biological criteria for Appendix I**

The following criteria must be read in conjunction with the definitions, explanations and guidelines listed in Annex 5, including the footnote with respect to application of the definition of 'decline' for commercially exploited aquatic species.

A species is considered to be threatened with extinction if it meets, or is likely to meet, **at least one** of the following criteria.

- A. The wild population is small, and is characterized by **at least one** of the following:
- i) an observed, inferred or projected decline in the number of individuals or the area and quality of habitat;
  - ii) each subpopulation being very small;
  - iii) a majority of individuals being concentrated geographically during one or more life-history phases;
  - iv) large short-term fluctuations in population size; or
  - v) a high vulnerability to either intrinsic or extrinsic factors.
- B. The wild population has a restricted area of distribution and is characterized by **at least one** of the following:
- i) fragmentation or occurrence at very few locations;
  - ii) large fluctuations in the area of distribution or the number of subpopulations;
  - iii) a high vulnerability to either intrinsic or extrinsic factors; or
  - iv) an observed, inferred or projected decrease in any one of the following:
    - the area of distribution;
    - the area of habitat;
    - the number of subpopulations;
    - the number of individuals;
    - the quality of habitat; or
    - the recruitment.
- C. A marked decline in the population size in the wild, which has been **either**:
- i) observed as ongoing or as having occurred in the past (but with a potential to resume); **or**
  - ii) inferred or projected on the basis of any one of the following:
    - a decrease in area of habitat;
    - a decrease in quality of habitat;
    - levels or patterns of exploitation;
    - a high vulnerability to either intrinsic or extrinsic factors; or
    - a decreasing recruitment.

**Annex 2 a Criteria for the inclusion of species in Appendix II  
in accordance with Article II, paragraph 2 (a), of the Convention**

The following criteria must be read in conjunction with the definitions, explanations and guidelines listed in Annex 5, including the footnote with respect to application of the definition of 'decline' for commercially exploited aquatic species.

A species should be included in Appendix II when, on the basis of available trade data and information on the status and trends of the wild population(s), **at least one** of the following criteria is met:

- A. It is known, or can be inferred or projected, that the regulation of trade in the species is

necessary to avoid it becoming eligible for inclusion in Appendix I in the near future; or  
B. It is known, or can be inferred or projected, that regulation of trade in the species is required to ensure that the harvest of specimens from the wild is not reducing the wild population to a level at which its survival might be threatened by continued harvesting or other influences.

## **Appendix 2 - Extracted definitions from Resolution Conf. 9.24 (Rev CoP16) Annex 5 Definitions, explanations and guidelines**

### ***Affected by trade***

A species "is or may be affected by trade" if:

- i) it is known to be in trade (using the definition of 'trade' in Article I of the Convention), and that trade has or may have a detrimental impact on the status of the species; or
- ii) it is suspected to be in trade, or there is demonstrable potential international demand for the species, that may be detrimental to its survival in the wild.

### ***Decline***

A 'decline' is a reduction in the abundance, or area of distribution, or area of habitat of a species. The assessment of decline by reference to area of habitat may be more appropriate where there are intrinsic difficulties in measuring the number of individuals.

Decline can be expressed in two different ways: (i) the overall long-term extent of decline; or (ii) the recent rate of decline. The long-term extent of decline is the total estimated or inferred percentage reduction from a baseline level of abundance or area of distribution. The recent rate of decline is the percentage change in abundance or area of distribution over a recent time period. The data used to estimate or infer a baseline for extent of decline should extend as far back into the past as possible. **The judgement that a decline is marked is taxon-specific and can be justified by a number of considerations, for example the population dynamics of a related taxonomic group. A general guideline for a marked historical extent of decline is a percentage decline to 5%-30% of the baseline, depending on the biology and productivity of the species.** Productivity is the maximum percentage growth rate of a population. It is a complex function of reproductive biology, fecundity individual growth rates, natural mortality, age at maturity and longevity. More-productive species tend to have high fecundity, rapid individual growth rates and high turnover of generations.

The extremes of 5% and 30% will be applicable to only a relatively small number of species, but some species may even fall outside of these extremes. However, both these figures are presented only as examples, since it is impossible to give numerical values that are applicable to all taxa because of differences in their biology (2see footnote with respect to application of decline to commercially exploited aquatic species).

A general guideline for a marked recent rate of decline is a percentage decline of 50% or more in the last 10 years or three generations, whichever is the longer. If the population is small, a percentage decline of 20% or more in the last 5 years or 2 generations (whichever is the longer) may be more appropriate. However, these figures are presented only as examples, since it is impossible to give numerical values that are applicable to all taxa because of differences in their biology.

The historical extent of decline and the recent rate of decline should be considered in conjunction with one another. In general, the higher the historical extent of decline, and the lower the productivity of the species, the more important a given recent rate of decline is.

In estimating or inferring the historical extent of decline or the recent rate of decline, all relevant data should be taken into account. A decline need not necessarily be ongoing. If data are available only for a short period and the extent or rate of decline based on these data are cause for concern, the guidelines above (extrapolated as necessary or relevant) should still apply. However, natural fluctuations should not normally count as part of a decline, but an observed decline should not necessarily be considered part of

a natural fluctuation unless there is evidence for this. A decline that is the result of legal activities carried out pursuant to a scientifically-based harvesting programme that reduces the population to a planned level, not detrimental to the survival of the species, would not normally be covered by the term 'decline'.

**FOOTNOTE Application of decline for commercially exploited aquatic species**

*In marine and large freshwater bodies, a narrower range of 5-20 % is deemed to be more appropriate in most cases, with a range of 5-10 % being applicable for species with high productivity, 10-15 % for species with medium productivity and 15- 20 % for species with low productivity. Nevertheless some species may fall outside this range. Low productivity is correlated with low mortality rate and high productivity with high mortality. One possible guideline for indexing productivity is the natural mortality rate, with the range 0.2-0.5 per year indicating medium productivity.*

*In general, the historical extent of decline should be the primary criterion for consideration of listing in Appendix I. However, in circumstances where information to estimate the extent of decline is limited, the rate of decline over a recent period could itself still provide some information on the extent of decline.*

*For listing in Appendix II, the historical extent of decline and the recent rate of decline should be considered in conjunction with one another. The higher the historical extent of decline, and the lower the productivity of the species, the more important a given recent rate of decline is.*

*A general guideline for a marked recent rate of decline is the rate of decline that would drive a population down within approximately a 10-year period from the current population level to the historical extent of decline guideline (i.e. 5-20 % of baseline for exploited fish species). There should rarely be a need for concern for populations that have exhibited an historical extent of decline of less than 50 %, unless the recent rate of decline has been extremely high.*

*Even if a population is not declining appreciably, it could be considered for listing in Appendix II if it is near the extent-of decline guidelines recommended above for consideration for Appendix-I listing. A range of between 5 % and 10 % above the relevant extent of decline might be considered as a definition of 'near', taking due account of the productivity of the species.*

*A recent rate of decline is important only if it is still occurring, or may resume, and is projected to lead to the species reaching the applicable point for that species in the Appendix-I extent-of-decline guidelines within approximately a 10-year period. Otherwise the overall extent of decline is what is important. When sufficient data are available, the recent rate of decline should be calculated over approximately a 10-year period. If fewer data are available, annual rates over a shorter period could be used. If there is evidence of a change in the trend, greater weight should be given to the more recent consistent trend. In most cases, listing would only be considered if the decline were projected to continue.*

*In considering the percentages indicated above, account needs to be taken of taxon- and case-specific biological and other factors that are likely to affect extinction risk. Depending on the biology, patterns of exploitation and area of distribution of the taxon, vulnerability factors (as listed in this Annex) may increase this risk, whereas mitigating factors (e.g. large absolute numbers or refugia) may reduce it.*

**Inferred or projected**

**This refers to estimations using indirect or direct methods.** Inferences may be made on the basis either of direct measurements or from indirect evidence. Projection involves extrapolation to infer likely future values.

***Near future***

This refers to a time period in which it can be projected or inferred that a species would satisfy one (or more) of the criteria in Annex 1 to the present Resolution unless it is included in Appendix II. This will be taxon- and case-specific but should be greater than 5 years and less than 10 years.

***Threatened with extinction***

'Threatened with extinction' is defined in Annex 1. The vulnerability of a species to threats of extinction depends on its population demographics, biological characteristics (such as body size, trophic level, life cycle, breeding structure or social structure requirements for successful reproduction), and vulnerability due to aggregating habits, natural fluctuations in population size, or residency/migratory patterns. This makes it impossible to give numerical threshold values for population size or area of distribution that are applicable to all taxa.