THE INTERPRETATION OF ANNEX 2 a (CRITERIA FOR THE INCLUSION OF SPECIES IN APPENDIX II IN ACCORDANCE WITH ARTICLE II, PARAGRAPH 2 (a), OF THE CONVENTION) AND ANNEX 5 (ANNEX 5 DEFINITIONS, EXPLANATIONS AND GUIDELINES) OF RESOLUTIONS CONF. 9.24 (REV. COP13) IN RELATION TO COMMERCIALLY-EXPLOITED AQUATIC SPECIES

1. The attached document has been submitted by The Food and Agriculture Organization of the United Nations (FAO).

2. The geographical designations employed in this document do not imply the expression of any opinion whatsoever on the part of the CITES Secretariat concerning the legal status of any country, territory, or area, or concerning the delimitation of its frontiers or boundaries.
The Interpretation of Annex 2 a (Criteria for the inclusion of species in Appendix II in accordance with Article II, paragraph 2 (a), of the Convention) and Annex 5 (Annex 5 Definitions, explanations and guidelines) of Resolution Conf. 9.24 (Rev. CoP13) in Relation to Commercially-exploited aquatic species

This document has been submitted by the Food and Agriculture Organization of the United Nations (FAO)

Introduction
This document has been prepared to clarify the links between Annex 2 a and Annex 5 of Res. Conf. 9.24 (Rev. CoP13) in particular in relation to commercially-exploited aquatic species. It is not intended to provide a full description of the biological criteria but only to elucidate the correct interpretations, in accordance with Annex 5, of Annex 2 a for such aquatic species.

Annex 2 a of Res. Conf. 9.24 (Rev. CoP13) states (underlining added by authors of this document):

“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.”

As clearly stated here, both Paragraph A and Paragraph B must be read in conjunction with Annex 5.

General

For commercially-exploited aquatic species, the best available information on population status is often time series of trends in some measure of abundance, such as from research surveys or catch-per-unit effort indices, which can often be used to estimate trends in abundance. Such time series, if long enough, can also allow for an estimate of the decline in population size against an appropriate baseline which is an important indicator of the status of the population. For these reasons, Annex 5 puts strong emphasis on the use of measures of decline and provides detailed guidelines on application of the term for commercially-exploited aquatic species in a special footnote. The footnote addresses two distinct measures of decline: historic extent-of-decline and recent rate of decline. These two provide separate, but complementary, information on the likely status and trends of a species.
The Relationship to Annex 2 a

It is important to note that Res Conf. 9.24 (Rev. CoP13) recognises, through the special references to commercially-exploited aquatic species in Annex 5, that the approach to Annex 2 a is different for this group than for other taxa. The primary reason for this is that, drawing on the rich empirical and theoretical knowledge available for commercially-exploited aquatic species, the Annex 5 guidelines are much more detailed and specific for this group than for other taxa.

Annex 2 a Paragraph A addresses the need to avoid a species becoming eligible for inclusion in Appendix I in the near future. The use of the term ‘near future’ clearly implies concerns about declines, be they in population size or area of distribution. Annex 2a Paragraph B can be invoked when the harvest of specimens from the wild is found to be reducing the wild population to a level at which its survival might be threatened by continued harvesting or other influences. Again, there is a clear reference to and concern about declines in Paragraph B, as evidenced by the use of the word ‘reducing’ in the criterion.

The emphasis on decline in both Paragraphs is well amplified by the Annex 5 footnote guidelines where it is stated:

“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. to 5-20% of baseline for exploited fish species [guideline for Appendix I criteria]). 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.”

In addition, it is stated in the footnote that:

“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.”

Annex 2 a also implicitly recognises that there may be a need to regulate international trade in a species which, although not currently declining, is at a level close to that at which it would become eligible for inclusion in Appendix I (Paragraph A) or at which its “survival might be threatened by continued harvesting or other influences” (Paragraph B). These two concerns are well by addressed the Annex 5 footnote for commercially-exploited aquatic species in the following paragraph:

“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.”
This creates a buffer zone above the Appendix I thresholds for population status. A species may therefore be considered for listing on Appendix II under Annex 2 a if the status of the species, as measured by historical extent-of-decline, falls within this buffer zone.

It is important to note that, for commercially-exploited aquatic species, the guidelines for the Appendix I extent-of-decline percentages have been set at a population level above the upper bound at which “survival might be threatened by continued harvesting or other influences”. The level where those effects become of concern is where depensatory\(^1\) effects, commonly called Allee effects, may negatively influence population dynamics. Since this population level is below the Appendix I thresholds, the same Annex 5 decline guidelines apply to both Paragraphs A and B.

Factors Likely to Affect Extinction Risk

Further, Annex 5 recognises the need to consider other factors that may affect the risks to a species in any given case and states that:

“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 [Annex 5]) may increase this risk, whereas mitigating factors (e.g. large absolute numbers or refugia) may reduce it.”

Conclusions

It is hoped that this brief explanation clarifies the appropriate interpretations, for commercially-exploited aquatic species, of Annex 2 a Paragraphs A and B in accordance with the definitions, explanations and guidelines provided in Annex 5. As affirmed at CoP13 in 2004 through its adoption of Res Conf 9.24 (Rev CoP13), both paragraphs of Annex 2 a must be read in conjunction with Annex 5 and must be interpreted accordingly, taking into account the differences that apply to commercially-exploited aquatic species. The assessments and recommendations regarding listing of the FAO ad hoc Advisory Panel were made in accordance with the explanation provided here, also taking into account other aspects of Annex 5 as appropriate.

Further, as elaborated above and stated in the FAO ad hoc Advisory Panel Report\(^2\), it is clear that for commercially-exploited aquatic species, application of Paragraph B requires demonstration of either a reduction that will lead to the species reaching the Appendix-I extent-of-decline guidelines within approximately a 10-year period, or that the species falls within the ‘buffer zone’ extent-of-decline (abundance) guidelines for Appendix II.

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1 Depensation is defined as a negative effect on population growth that becomes proportionately greater as population size declines. Populations experiencing depensation are prone to further reductions in size, even in the absence of exploitation, and therefore have a greater risk of extinction.