APPLICATION OF THE CRITERIA FOR LISTING COMMERCIALY EXPLOITED AQUATIC SPECIES IN THE CITES APPENDICES

This document has been submitted by the European Union and its Member States and Panama in relation to CoP19 Prop. 37 on Requiem sharks (Carcharhinidae spp.), Prop. 38 on Hammerhead sharks (Sphyrnidae spp.) and Prop. 42 on sea cucumbers (Thelenota spp.) for inclusion of these species in Appendix II.

We welcome the assessment of the listing proposals by the Seventh FAO Expert Advisory Panel for the assessment of the proposals to amend Appendices I and II of CITES concerning commercially-exploited aquatic species (Rome, 18–22 July 2022). We recognize that FAO Panel experts carry out a great deal of technical work in a limited period, and that their advice is a highly valuable contribution to the deliberations of the CITES CoP.

We would like to make some brief observations to the report of the Panel.

1. General consideration

CITES Appendix II allows the sustainable use of wild species; it does not prohibit fishing or prevent domestic consumption. CITES is complementary to the FAO International Plan of Action for the Conservation and Management of Sharks (IPOA–Sharks), as well as complementing fishery management and monitoring measures.

2. Availability of data

Stock assessments do not exist for the majority of rare and threatened aquatic species. Indeed, scientific assessments are only available for a selection of commercially important fish stocks, which combined supply about half of the reported global marine fish catch (FAO 2020; Hilborn et al. 2020). Res. Conf. 9.24 (Rev.17) recognizes in several paragraphs that data may not always be sufficient to enable quantitative evaluations to be made, or for decadal trends to be tracked. Other sources of information must therefore be used when considering whether species meet the CITES listing criteria. At present IUCN Red List assessments are the most robust status evaluations available for most shark and ray species, as well as other marine species.

Only a limited number of genetic studies of shark products in trade have been undertaken. Although rare and depleted species (particularly those with a limited range) may not have been reported in these studies, this does not mean that they are not being traded, albeit in volumes proportionate to their low abundance in the wild. There is a high level of demand for shark fin and meat products in international markets (e.g. Dent and Clarke 2015; Pavitt et al. 2021), and rarity does not shield species from this demand.

3. Application of trade criteria

With regard to the assessment whether a species is “affected by trade”, the definition in Annex 5 of Res. Conf. 9.24 (Rev. CoP17) should be used. The definition includes that a species “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.”

However, the FAO Panel’s interpretation of “affected by trade” appears to differ from this definition and instead requires that verifiable species-specific data on its presence in international trade are presented in the listing proposal. Verifiable published evidence seen by the Panel and cited in the Panel report (e.g., for the Caribbean Reef Shark *Carcharhinus perezi*) was deemed by the Panel insufficient for the trade criterion to be met, because it had not been cited in the original proposal. Furthermore, the Panel concluded that trade must not only be demonstrated to be occurring, but that international trade should be a major component or significant driver of fishing pressure before a species can qualify for listing in Appendix II. This does not align with the CITES definition as quoted above.

FAO’s last major review of the global market for shark products (Dent and Clarke 2015) states: “*Even as the total declared value of world trade in shark products approaches USD 1 billion traded per year, the state of knowledge of this increasing globalized market remains limited.*” More recent data on the biological and trade status of sharks are summarized in Fowler *et al.* 2021, whose review notes that according to the IUCN Red List, almost 90% of the 1,186 chondrichthyan fish species assessed are threatened by fishing. However, only 153 species of sharks and a further 28 taxonomic groupings of shark, ray and chimaera species are recorded as caught by international fisheries worldwide (FAO 2019). International demand for the meat, fins and other products from requiem sharks, hammerheads, and wedge fish is clearly demonstrable; their products are suspected to supply this globalized market, even if they have not yet been recorded there and/or these records are not published. There is certainly “demonstrable potential international demand for [all these] species, that may be detrimental to [their] survival in the wild”, including those that are now Critically Endangered, even Possibly Extinct. The species therefore meet the trade criteria as stipulated in Annex 5 of Res. Conf. 9.24 (Rev. CoP17).

### 4. Precautionary approach

The precautionary approach is embedded in the second operative paragraph of Res. Conf. 9.24 (Rev.17), which “RESOLVES: that, by virtue of the precautionary approach and in case of uncertainty regarding the status of a species or the impact of trade on the conservation of a species, the Parties shall act in the best interest of the conservation of the species concerned and, when considering proposals to amend Appendix I or II, adopt measures that are proportionate to the anticipated risks to the species”.

Implementing this approach, when there is uncertainty regarding whether species meet the CITES listing criteria, should be reflected in an acknowledgement of that uncertainty. Uncertainty is mentioned in the text of some of the FAO Panel’s assessments but is not reflected in any of their recommendations. Rather, uncertainty regarding whether certain data-poor species meet the listing criteria for Appendix II is followed, for several aquatic species, by a recommendation that the criteria are not met. In no case was the FAO Panel’s recognition of uncertainty followed by a ‘could not determine’ or a precautionary positive finding.

### 5. Lookalike criteria

Listing of species in CITES Appendix II under Article II paragraph 2 (b) is one of the fundamental principles of the Convention, which has been applied since the first meeting of the Conference of Parties and regularly thereafter. It has been employed at many taxonomic levels, from genus to family and order, including *inter-alia* cats, otters, bears, cetaceans, primates, birds, reptiles, sturgeons, invertebrates, and plants. About 1,500 cacti and almost 30,000 orchids in families *Cactaceae* and *Orchidaceae* are listed as lookalikes, considerably dwarfing the number of named threatened cacti and orchids in the listing proposals for those taxa. Lookalike listings where often applied to species that are traded alive and are in fact easier to identify, compared to dried or processed products.

When considering lookalike listings, the status of the lookalike species is not a consideration (fewer than 50% of cats in Family Felidae in the IUCN Red List are assessed as threatened). The fundamental principle, set out in Article II paragraph 2b, is to make it possible to control trade in those species that are listed.

The primary criterion against which lookalike proposals are judged is defined in Annex 2b paragraph A of Res. Conf. 9.24 (Rev. CoP17): *The specimens of the species in the form in which they are traded resemble*
specimens of a species included in Appendix II under the provisions of Article II, paragraph 2 (a), or in Appendix I, so that enforcement officers who encounter specimens of CITES-listed species are unlikely to be able to distinguish between them.

As explained above, the relatively small number of sharks and batoids already listed under Article II 2b, and those now proposed for listing at CoP 19, does not set a precedent. Many of the products of these sharks and batoids that enter trade, particularly fins, meat, and skin, are not easy for enforcement officers to identify to species level. Indeed, several closely related sharks and rays are difficult to identify to species level even when landed as whole specimens – but whole specimens of sharks and batoids are (except for some introductions from the sea) extremely rare in international trade.

6. Additional considerations in relations to the specific proposals

CoP19 Proposal 37 – Nineteen species in Family Carcharhinidae (Requiem sharks)

- **Trade criteria**
  The FAO Panel’s interpretation of the CITES definition of “affected by trade” (Article II 1 and 2 of the CITES Convention) led to the exclusion of nine out of 19 species:
  - Borneo shark (*Carcharhinus borneensis*) (Critically Endangered)
  - Pacific smalltail shark (*Carcharhinus cerdale*) (Critically Endangered)
  - Pondicherry shark (*Carcharhinus hemiodon*) (Critically Endangered)
  - Lost shark (*Carcharhinus obsoletus*) (Critically Endangered)
  - Caribbean reef shark (*Carcharhinus perezi*) (Endangered)
  - Night shark (*Carcharhinus signatus*) (Endangered)
  - Daggernose shark (*Isogomphodon oxyrhynchus*) (Critically Endangered)
  - Borneo broadfin shark (*Lamiopsis tephrodes*) (Endangered)
  - Whitenose shark (*Nasolamia velox*) (Endangered)

  The Lost Shark (*Carcharhinus obsoletus*) is classified by IUCN as Possibly Extinct (fewer than 50 adults may survive).

  The Pondicherry Shark (*Carcharhinus hemiodon*) was last recorded in 1960 (fewer than 250 adults are thought to survive).

  Three other Critically Endangered species [Borneo shark (*Carcharhinus borneensis*), Pacific smalltail shark (*Carcharhinus cerdale*) and Daggernose shark (*Isogomphodon oxyrhynchus*)] have declined to less than 20% of their abundance three generations ago, thus meeting criteria for inclusion in Appendix I. The Caribbean Reef Shark (*Carcharhinus perezi*) was excluded from review, although the FAO Panel report cites a published source of trade data for this species. We are convinced that all 19 species fulfill the trade criteria.

- **Biological criteria**
  The remaining ten species were considered under the biological decline criteria. The FAO Panel considered that there were sufficient data to demonstrate that three of these species meet the threshold for listing in Appendix II. This included the two Critically Endangered species for which there is published evidence of international trade [Pacific smalltail shark (*Carcharhinus porosus*) and Ganges shark (*Glyphis gangeticus*)], and one Endangered species [Grey reef shark (*Carcharhinus amblyrhnchos*)]. It is likely that the majority of the species excluded from the review as explained above would have been found to qualify for listing, had they also been evaluated using the biological criteria.

  The FAO Panel found that they did not have sufficient information to evaluate the declines experienced by four endangered species that are reported in trade but have only rarely been recorded in fisheries:
  - Blacknose shark (*Carcharhinus acronotus*)
  - Smoothtooth blacktip shark (*Carcharhinus leiodon*)
  - Broadfin shark (*Lamiopsis temmincki*)
  - Sharptooth lemon shark (*Negaprion acutidens*)
The determination of “insufficient information” described in the text was later “translated” into a finding of “does not meet the criteria”. Earlier FAO Panels (apart from the 6th one) have stated in these cases that they were unable to determine whether species met the criteria or not.

All endangered species were considered by the FAO Panel not to meet the biological listing criteria. Whitecheek shark (Carcharhinus dussumieri), Dusky shark (Carcharhinus obscurus) and Sandbar shark (Carcharhinus plumbeus) are the only species out of the 19 in the proposal that were thoroughly examined by the FAO Panel and found not to meet the listing criteria adopted by the Parties in Res. Conf. 9.24 (Rev.17). However, as can be seen in Inf. Doc. Proposal 37, there is evidence for both the dusky and sandbar shark that the criteria are met.

- Lookalike species

The requiem shark listing proposal gave a detailed account in section 6.3 (pages 40-42 in the English language text) regarding the challenges of identification of products in trade and lookalike issues. To support the inclusion of lookalike species in the family of requiem sharks, Annex 1 (pages 53-57) provides detailed matrices identifying inter-species lookalike issues for meat and for dorsal, pectoral, and lower caudal fins, which are the largest and most valuable shark fins. These and other published and widely distributed identification materials (e.g., https://www.iucnssg.org/publications-id-guide.html) were not reviewed by the FAO Panel. The Panel focused on the identification of certain small coastal sharks that are landed whole, but do not enter international trade intact, and presented comments asserting that it is easy to differentiate and confidently identify fins at species level in trade. The matrices presented in Annex 1 of the proposal identify the cases where this is not possible and demonstrate that this applies across the whole family. By this the proponents of the requiem shark proposal put in significant effort to for the first time actually operationalize the look-a-like matter for the scope of the present proposal. This lookalike analysis in Annex I of the proposal has now been updated in CoP19 Inf.2.

CoP19 Proposal 38 – Bonnethead shark Sphyrna tiburo

The FAO Expert Panel report for this species is well-presented and coherent. CITES texts were cited correctly and the biological decline criteria used appropriately.

The FAO Panel notes that a CITES listing for this species would not affect domestic fisheries and markets and that the lookalike listings and management measures are appropriate at Family level. They also list the potential benefits of listing and capacity-building needs. The former includes encouraging improved catch and trade data collection, better fisheries management, and compliance monitoring, including the development of robust non-detriment findings (NDFs).

CoP19 Proposal 42 – Sea cucumbers, Thelenota ananas, T. anax and T. rubralineata

The FAO Panel’s interpretation of the CITES listing criteria as discussed above in sections 1-5 led the Panel to conclude that these species do not meet the criteria for listing in Appendix II, either because their populations are capable of surviving boom and bust fishery cycles, or because they are too rare to support commercial fisheries.

The three species of the genus Thelenota fulfill criteria A and B of Annex 2a of Resolution Conf. 9.24 (Rev. CoP17) in accordance with Article II, paragraph 2(a), of the convention. The general demand for sea cucumber is growing. Sea cucumbers have very few natural predators and the habitats they occupy have been little degraded. The main cause of their decline is overfishing, for international trade. Species of the genus Thelenota are massive, among the largest sea cucumbers, they are easily detected and caught and this makes them profitable targets. They are vulnerable to overexploitation due to their life history.

In many areas, species of this genus have almost disappeared over the past ten years (Conand et al., 2013a; Conand et al., 2013b, Conand et al., 2013c). In certain sectors where the species is still present, monitoring shows a steady decline in numbers. Fishing moratoriums of 5 to 8 years have allowed, in certain sectors, a partial reconstitution of the populations concerned (FAO, 2022), but such measures are difficult to renew.
The FAO Panel recognizes for the genus a moderate productivity and a depensatory (Allee) effect: when the population decreases, fecundity also falls, which accelerates the decline. Growth rates are unknown. Longevity is unknown. Natural mortality rate is low, which means population declines are caused by harvesting pressure. The FAO Panel acknowledged that many populations had declined, almost exclusively due to overfishing for the international trade. CITES listing of the species would allow a better monitoring and thus a basis for sustainable use of the species.

We therefore strongly advocate the Appendix II listing of the species due to precautionary measures.

7. Conclusion

The FAO Panel’s interpretation of the CITES listing criteria is, in our opinion, not entirely consistent with the definitions contained in Annex 5 of Res. Conf. 9.24 (Rev. CoP17), and has led the Panel to conclude that several species proposed by Parties did not meet the required listing criteria. This is not a conclusion that we can support.
References


