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

Seventeenth meeting of the Conference of the Parties
Johannesburg (South Africa), 24 September - 5 October 2016

Species trade and conservation

CONSERVATION OF AND TRADE IN *ANGUILLA* SPP.

1. This document has been submitted by the European Union and its Member States.[*]

Background

2. International trade in *Anguilla* species[1] has existed for decades and includes products related to aquaculture, food and accessories. Harvest of the species for this trade and domestic use, combined with a number of other threats such as barriers to migration, habitat loss, turbine mortality, pollution, disease and parasites, predators have reduced some *Anguilla* species populations to levels requiring that their trade is controlled in order to avoid utilization incompatible with their survival. However, once collection and/or trade in one *Anguilla* species is regulated due to population declines, the demand is redirected to other species. There is therefore an urgent need to consolidate data on trade and management of Anguillid eels so they can be sustainably managed as a group.

3. The European eel (*Anguilla anguilla*) was listed in CITES Appendix II at CoP14 and the listing came into force in 2009. The biological status of the species has notably been monitored for years by the ICES/GFCM/EIFAAC2 Working Group on Eels (WGEEL). Due to its depleted status within Europe, the EU has been unable to make a positive non-detriment finding for the species since December 2010. Currently export and import of this species from and into the EU is not permitted, and all EU Member States have published a zero export quota for European Eel since 2011. To improve the conservation status of the species, in 2007 the EU adopted internal legislation3 on eel conservation, establishing measures for the recovery of the stock of European eel. In accordance with the obligations set out in this Regulation, Member States of the EU have developed eel management plans at national level. These plans include management measures (e.g. reduction in fisheries, improving river continuity, reducing pollution) aiming to ensure that the escapement of adult eels towards their marine spawning grounds reaches in the long term at least 40% of the estimated biomass that would have escaped in the absence of anthropogenic influence.

4. Following the listing of the European Eel, and the establishment of zero export quotas by EU Member States, there was an historic increase in demand, harvest and export of other Anguilla species, in particular the American eel (*A. rostrata*) and tropical species such *Anguilla bicolor*. This demand was fuelled primarily by markets in Asia which had previously imported large quantities of live juveniles (glass eels or elvers) of European eel to supply their farms (in addition to using the local species *A. japonica*, Japanese Eel). According to East Asian Customs import data, between 2004 and 2010 over 90% of all eel fry (total annual imports averaging 130 tonnes) was imported from other East Asian

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[*] *The geographical designations employed in this document do not imply the expression of any opinion whatsoever on the part of the CITES Secretariat (or the United Nations Environment Programme) concerning the legal status of any country, territory, or area, or concerning the delimitation of its frontiers or boundaries. The responsibility for the contents of the document rests exclusively with its author.*

1 There are 16 species of freshwater eels in the genus Anguilla

2 International Council for the Exploration of the Sea / General Fisheries Commission for the Mediterranean / European Inland Fisheries and Aquaculture Advisory Commission

3 Council Regulation (EC) No. 1100/2007

countries/territories (>60%) or Europe (>30%), i.e. *A. japonica* and *A. anguilla*. Between 2011 and 2014, proportions shifted dramatically, with the Americas (>30%) and South-east Asia (>35%) supplying over 65% of all eel fry (total annual imports 90 tonnes) to East Asia for farming. From 2011 onwards there was also an increase in *A. anguilla* eel fry supplied from North Africa. In response to the increased demand and harvest of these other species as a result of the decline in availability of European Eel from the EU, and concerns over the consequent rapid increase in their exploitation, a number of range States have introduced regulations to limit/prohibit harvest and/or trade in their native *Anguilla* species. In the US a harvest quota has been introduced and regulation imposed to help limit the expansion of the harvest within the U.S. Currently, harvest is limited to a fishery in the state of Maine, which produces the vast majority of the glass eels exported, and the state of South Carolina. Measures to control exports, in particular of juvenile life stages, in some tropical species are also in place in countries such as the Philippines[4] and Indonesia. In 2014, The Bureau of Fisheries of People's Republic of China, the Fisheries Agency of Japan, the Ministry of Oceans and Fisheries of the Republic of Korea and the Fisheries Agency of Chinese Taipei published a joint statement on International Cooperation for Conservation and Management of Japanese Eel Stock and Other Relevant Eel Species5. However, there are still major concerns over sourcing levels and illegal trade.

Illegal trade in all species/populations which are under some form of regulation is a particular concern. Based on regular analyses of CITES, customs and East Asian eel farming data, seizures and information from traders over the last five years, there is evidence of ongoing illegal eel trade from Europe, East Asia and South-east Asia. In most seizure cases, identification through DNA analysis was required to verify the species in trade, as look-alike issues (combined with the complexities resulting from the various commodities in trade) make enforcement of any regulations for this taxonomic group a particular challenge.

5. Anguillid species, in addition to unsustainable harvest, have been impacted worldwide by a combination of factors. While these threats are often regional, when taken together throughout an individual's life cycle, they can severely impact species fitness. ICES advice on European eel constantly underlines that the state of the stock remains critical. In addition, Indonesian Longfinned Eel (*Anguilla borneensis*), Japanese Eel (*Anguilla japonica*), American Eel (*Anguilla rostrata*) are listed on the IUCN Red List as 'Threatened' (Vulnerable, Endangered or Critically Endangered); Indian Mottled Eel (*Anguilla bengalensis*), Shortfin Eel (*Anguilla bicolor*), Celebes Longfin Eel (*Anguilla celebesensis*), Philippine Mottled Eel (*Anguilla luzonensis*) were Near Threatened, Highlands Long-finned Eel (*Anguilla interioris*), Pacific Long-finned Eel (*Anguilla megastoma*), Pacific Shortfin Eel (*Anguilla obscura*) were Data Deficient, and Marbled Eel (*Anguilla marmorata*) and African Longfin Eel (*Anguilla mossambica*) were deemed Least Concern. There are plans to repeat and expand on these assessments in 2018, in an attempt to fill the current large knowledge gaps that exist for this group of species[6].

6. One of the key issues hampering both conservation and effective management of *Anguilla* species is the lack of data. In the case of American Eel there are data for most of this species' life stages (glass, elver, yellow and silver) from the northern part of its range (Canada and central Atlantic States), but very little data exists from its southern range (extending to the Caribbean and northern South America). Even in the areas from which there is data, it is often fishery dependent and therefore does not provide a full, unbiased record of the changes in abundance observed. The situation is similar, or worse, for many of the other species, in particular the tropical species. Such data gaps are preventing vital decision-making - for European Eel there is currently insufficient information for the EU to carry out an NDF and for Japanese Eel various knowledge gaps, in particular on farming practices in East Asia, are limiting collaborative management in the region.

7. Collating available and new data on the biology, population status, use and trade in each *Anguilla* species is therefore essential. Most *Anguilla* species are considered panmictic (all individuals being potential reproductive partners), each species being made up of a single population. Until the genetic diversity within these panmictic populations is fully understood, it is vital to ensure survival of these species throughout their ranges.

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4 Fisheries Administrative Order 242: http://www.bfar.da.gov.ph/LAW?fi=405#post

5 http://www.jfa.maff.go.jp/j/saibai/pdf/140917jointstatement.pdf.

6 Synergistic patterns of threat and the challenges facing global anguillid eel conservation: http://*www.sciencedirect.com/science/article/pii/S2351989415000827*

Recommendation

8. To allow for more information and data to be gathered on population abundance and exploitation, and to facilitate the development of recommendations on the sustainable trade of all *Anguilla* species, it is recommended that the Conference of the Parties consider the information presented in this document and adopt the draft decisions attached in Annex 1.

Annex 1

DRAFT DECISIONS OF THE CONFERENCE OF THE PARTIES

Directed to the Secretariat

17.x1 The Secretariat shall, subject to external funding:

a) contract independent consultants to undertake a study compiling information on challenges and lessons learnt with regards to implementation of the Appendix II listing of European Eel (*Anguilla anguilla*) and its effectiveness. This includes in particular the making of Non-Detriment Findings, enforcement and identification challenges, as well as illegal trade. This study should notably take account of the data compiled and advice issued by the ICES/GFCM/EIFAAC Working Group Eel;

b) contract independent consultants to undertake a study on non-CITES listed *Anguilla* species:

   i) documenting trade levels and possible changes in trade patterns following the entry into force of the listing of the European Eel in CITES Appendix II in 2009;

   ii) compiling available data and information on the biology, population status, use and trade in each species, as well as identifying gaps in such data and information, based on the latest available data and taking account inter alia of the Red List assessments by the IUCN Anguillid Eel Specialist Group;

   iii) providing recommendations for priority topics for technical workshops based on gaps and challenges identified under i)-iii);

c) make the reports from the studies above available to the 29th meeting of the Animals Committee (AC29) for their consideration;

d) organize, where appropriate, international technical workshops, inviting cooperation with and participation by the relevant range States, trading countries, FAO, the IUCN Anguillid Eel Specialist Group, the ICES/GFCM/EIFAAC Working Group Eel, industry and other experts appointed by Parties as appropriate.

   Such workshops should in particular cover the topics identified by the reports described in Decision 17.x1.a and b and could focus on challenges specific to the various eel species, such as

   i. in relation to European eel, the realization of and guidance available for Non-Detriment Findings, as well as enforcement of the Appendix II listing including identification challenges;

   ii. in relation to the other eel species, to enable a better understanding of the effects of international trade, including trade in their various life stages, and possible measures to ensure sustainable trade in such species ;

e) make any workshop report available to the 30th meeting of the Animals Committee (AC30) for their consideration.

Directed to Parties involved in trade in *Anguilla* species

17.x2 Parties involved in trade in *Anguilla* species, in collaboration with the Secretariat and FAO, are encouraged to:

a) provide the Secretariat and their consultants with specific information needed for the purposes of completing Decision 17.x1 a and b;

b) participate, where appropriate, in the technical workshops and share expertise and knowledge on the priority topics identified (examples provided under in Decision 17.x1 d).

Directed to the Animals Committee

17.x3 The Animals Committee shall:

a) consider, at its 29th and 30th meetings, the reports produced under Decisions 17.x1, as well as the information submitted by European Eel range States pursuant to Decision 17.x2, and any other relevant information on conservation of and trade in *Anguilla* species;

b) provide recommendations to ensure the sustainable trade in *Anguilla* species, to Parties for consideration at CoP18.

Directed to the Standing Committee

17.x4 The Standing Committee shall consider information relating to illegal trade in European eel at its 69th and 70th meetings and adopt recommendations as appropriate.