I. Opening of the meeting

1. The Chair, Mr. Staffan Danielsson of the Natural Environment Division, Ministry for the Environment and Energy, Sweden, opened the meeting, welcoming participants to Malmö and thanking the host, the World Maritime University (WMU) and the organizers, the Convention on Migratory Species (CMS) and the Sargasso Sea Commission (SSC).

II. Welcoming remarks

2. Dr. Cleopatra Doumbia-Henry (President, WMU) also welcomed the participants and thanked the co-organizers of the meeting.

3. She commented that the 35th anniversary of the WMU had just been celebrated. Over the past 35 years, 4,600 post-graduate degrees had been awarded to students from 168 countries. The WMU courses focused on capacity-building in the maritime and oceanic fields and were relevant to achieving the Sustainable Development Goals (SDGs), particularly SDG4 on education and SDG14 on life in the oceans. Earlier in the month, the WMU had also celebrated the launch of the WMU-Sasakawa Global Ocean Institute, which was one of the co-sponsors of the meeting.

4. She was aware of important role that migratory species such as Anguilla anguilla played in their ecosystem and of the need for strong multinational cooperation and coordination. It was gratifying therefore to see that so many experts, and representatives from Range States, IGOS and NGOs were present.

5. Professor Ronan Long (Director of Global Ocean Institute, WMU) said that it was a great honour for his newly established institute to host the meeting. The WMU was the only UN body based in Sweden and it was fitting that the Deputy Prime Minister, herself an expert on eels, had attended the Institute’s opening ceremony earlier in May.

6. Dr. Bradnee Chambers (Executive Secretary, CMS) thanked the Host Government, the WMU and the partners, who had funded and helped organize the workshop, namely the Government of the Principality of Monaco and the SSC. He said that the establishment of the Global Ocean Institute was timely given the challenges faced by the oceans.
7. *Anguilla anguilla* had a wide range stretching from Norway to the Mediterranean. It undertook long migrations at the beginning and end of its life cycle and was found in a variety of habitats including rivers, lakes, coastal waters and the Sargasso Sea. The species, which was Critically Endangered on the IUCN Red List, needed international cooperation transcending all the Range States.

8. Dr. Chambers noted that 22 Range States were present underlining the interest in the issue of eel conservation. The first workshop in Galway, Ireland in October 2016 had brought together key stakeholders and the CMS Conference of the Parties in Manila in October 2017 had further prepared the ground. There were many complex issues that needed to be addressed and the challenge for the Range States was to find solutions.

9. Dr. David Freestone (Executive Secretary, SSC) explained the role of the SSC in working to protect what was described as the “floating rain forest of the Atlantic”. The SSC had been established through the 2014 Hamilton Declaration. Fifteen governments had been involved in its drafting and ten governments had so far signed.

10. The Sargasso Sea was an important nursery and feeding habitat for the American and European Eel and for many commercially exploited fish, such as tuna and billfishes, and for threatened and endangered migratory species, such as marine turtles and whales.

11. The previous month, the Dominican Republic had hosted a workshop for Range States of the American Eel (*Anguilla rostrata*) for which the Sargasso Sea served as both cradle and grave as it did for *A. anguilla*. The report of that workshop would be submitted to the forthcoming meeting of the CITES Animals Committee along with the outcomes of the present workshop.

12. The Sargasso Sea was recognized by the Convention on Biological Diversity (CBD) as an Ecologically or Biologically Significant Area (EBSA).

13. The Chair proposed conducting a tour de table allowing participants to introduce themselves. The full list of participants can be found at Annex 1 to this report.

**III. Adoption of the Agenda**

14. The Chair introduced the agenda of the meeting and invited comments. There being none, the Chair declared that the agenda had been adopted as presented.

**IV. State of Conservation and Management of *Anguilla anguilla***

15. There followed three presentations, from Dr. Matthew Gollock of the Zoological Society of London (ZSL), Dr. Alan Walker of the International Council for the Exploration of the Sea (ICES) and Professor Howard Roe, a Sargasso Sea Commissioner. All presentations can be found on the [meeting webpage](#).

16. Dr. Matthew Gollock (ZSL) gave a broad overview of the status of the *Anguilla anguilla* and current management measures being implemented.
17. There were 16 species of Anguillid eel including *Anguilla anguilla*. Anguillid eels were found in temperate and tropical waters, only being absent from the polar waters, West Africa and the Pacific coast of the USA. Anguillid eels had multiple life stages, and were catadromous and panmictic.

18. The impacts, which had led to conservation concern, included climate change, drought, disease and parasites, pollution, barriers to migration, lower lipid stores, reduced fecundity, exploitation and predation. These threats varied across the species’ range and it was not clear how the threats had a cumulative effect. Management was primarily being carried out in continental waters.

19. Relevant legislation and international measures for the European Eel included EU Council Regulation 1100/2007, listing on CITES Appendix II in 2007, the cessation of trade to and from the EU in 2010 and Appendix II-listing on CMS in 2014.

20. A shift in trade had been noticeable following the EU trade ban, with North Africa seeing an increased trade in the European Eel, and the Americas and South-East Asia also seeing increased demand. CITES Decision 17.186 included a call for regional workshops to be held. The workshop in the Dominican Republic had been convened in response to this call. CMS and SSC had tried hard to coordinate this meeting on the European Eel with the CITES Secretariat but it had not proved possible. However, a brief summary of this meeting would be submitted to the CITES Animals Committee.

21. Dr. Alan Walker of the Centre for Environment, Fisheries and Aquaculture Science (CEFAS) gave a presentation on stock assessment and management. He pointed out that a joint working group of the EIFAAC (European Inland Fisheries and Aquaculture Advisory Commission - FAO), ICES and the General Fisheries Commission for the Mediterranean (GFCM) already operated, with an annual meeting and ad hoc workshops. This working group was made up of key national scientists with expertise in the North Atlantic, North Sea, Baltic and Mediterranean regions.

22. ICES was commissioned to provide annual advice to the European Union. The process under ICES involved data being submitted by national agencies to an expert group, the Working Group on Eel (WGEEL). This working group updated the assessment of the state of the stock and impacts, and then advice was drafted by a further Advice Drafting Group, before consideration by the Advisory Committee (ACOM). Finally, the advice was passed to the client.

23. Regarding data reporting, the EU had a data collection framework (the DC MAP), specifying which data needed to be collected in support of stock assessments. The EU also provided co-funding to EU Member States for the collection of these data.

24. Scientific knowledge in eel stock assessment and associated data collection and reporting were being progressed through the annual meetings of WGEEL and a series of other workshops. The WGEEL had recently formalized data reporting through annual Data Calls, requiring information on recruitment, catches, fishing effort, stocking, aquaculture production, stock indicators of biomass and mortality rates.
25. Professor Howard Roe, Sargasso Sea Commissioner, gave a presentation summarizing historical and recent work investigating spawning of the European Eel in the Sargasso Sea, first identified as the spawning area by Schmidt in the 1920s.

26. Several oceanographic features had an impact on the Sargasso Sea and consequently the occurrence and life cycle of Anguilla anguilla. The Sargasso Sea lay within the North Atlantic Subtropical gyre bounded by variable clockwise rotating currents. Within the gyre in the south and west Sargasso Sea was the subtropical convergence zone where warm and cold-water masses met and created distinct seasonal temperature fronts. Thirdly, the North Atlantic Oscillation - the fluctuation in atmospheric pressure at sea level between the Icelandic low and Azores high - controlled the strength and direction of westerly winds and hence impacts ocean currents.

27. Recent data on migration of silver eels had been obtained from a tagging programme. Seven hundred and seven silver eels were tagged and released in estuaries of European rivers. Thirty-three of these reached the open ocean, and one, originating from Ireland, reached the Azores after 200 days during which it swam ca 5,000 km. None had been tracked further west. These results showed that silver eels did not head straight for the Sargasso Sea but took advantage of the clockwise rotating Azores and for them to reach the Sargasso Sea in time for the assumed peak spawning period of December-February. This raised questions on both spawning times and the ability of eels to survive for long periods without eating. In any event, no European Eel had yet been tagged all the way to the presumed spawning area.

28. The occurrence of leptocephali larvae identified the subtropical convergence zone (STCZ) within the Sargasso Sea as the main spawning area. The STCZ concentrated the prey of leptocephali larvae and also provided a possible short cut back to European and African rivers via an eastward flowing counter current. Surveys of leptocephali had identified a marked reduction in numbers matching the observed decline in recruitment of glass eels outside the North Sea.

29. Falling recruitment had been linked to various oceanic and atmospheric changes; it was possible that these changes combined with the effect and timing of human influences had created a “perfect storm”, which had adversely impacted populations of Anguilla Anguilla.

30. The Sargasso Sea was itself threatened by various factors including climate change, pollution from plastic and oil spills, and fishing. Plastic pollution was a potential threat to the development of anguillid leptocephali as microplastic particles might become attached to marine snow - a principal food of the larvae.

31. The Sargasso Sea was absolutely essential for the survival of eels, but despite being an EBSA the Sargasso Sea was threatened. It was open ocean and part of the High Seas, which did not fall under any national jurisdiction. Ways forward might be found in the forthcoming negotiations under the UN concerning the High Seas. Within the Sargasso Sea, the geographic location of the critical area of the subtropical convergence zone could be defined and temporal closure of fisheries within this might be an option, as had been tried and tested by Regional Fisheries Management Organizations (RFMOs) elsewhere.

32. In summary, Professor Roe said that knowledge of the marine life of Anguilla anguilla was improving but there were still many unanswered questions about how and when the eels reached the Sargasso Sea and how they found their way back to the rivers.
Question & Answer Session

33. There followed a question and answer session during which participants discussed the factors most responsible for the decline in eels. *Anguilla anguilla* was probably the most threatened Anguillid species but the most recent IUCN Red List assessment had been made five years previously – this would be updated in 2019. Knowledge levels for several species had improved, but needed to be further enhanced. Species other than *A. anguilla* were being exploited more than they had been before. There was a continuing debate over the role of fisheries in the species’ decline. It seemed likely that fisheries were a major contributing factor, but other pressures also played a role. Fisheries, which were relatively easy to assess, might be the main cause of decline in some areas, while habitat loss would be more significant in others. With an average generational cycle of 12-15 years, it would take time to know whether interventions on younger eel stages had any effect. Contamination with polychlorinated biphenyls (PCBs) was high in parts of Europe, making eels unsafe for human consumption. It was not clear whether high levels of PCBs were affecting eels’ fertility. The effect of parasite infestation might also be significant. It was agreed that in accordance with the precautionary approach action should not be delayed for want of more data and that transboundary cooperation was necessary and that an international forum could help coordinate actions. It was pointed out that glass eel recruitment had collapsed in the 1980s. Fishing, the development of hydropower and PCB contamination all pre-dated this and it was possible that pressures building since the 1920s had reached a tipping point. The parasite had spread from eel farms in Belgium in the 1980s, and if not a cause of the collapse, had probably impeded recovery. It was also agreed that action was needed in the High Seas and the current negotiations being conducted under the auspices of the UN were potential a useful vehicle, should it be decided to develop a legally binding instrument. The Hamilton Declaration, which had led to the creation of the SSC, provided a framework for cooperation using existing mechanisms and had a limited mandate, although there was scope for it to evolve into a regulatory body along the lines of OSPAR.

V. Existing institutional frameworks and initiatives

34. Ms. Melanie Virtue (CMS Secretariat) gave a presentation on the First Workshop held in Galway, Ireland in October 2016 and relevant outcomes from the CMS Conference of the Parties held in Manila in 2017.

35. Ms. Virtue noted that a high proportion of Range States for the European Eel were Parties to CMS, with just Lebanon, the Russian Federation and Turkey being exceptions.

36. In 2016 the First Range State Workshop had been held in conjunction with the SSC, and the American Eel had also been discussed. This workshop had examined the possibility of negotiating an instrument under CMS, identifying stakeholders such as RFMOs and other partners. The present meeting was the follow-up and invitations had been extended to all the Range States, including the non-EU States, particularly from North Africa.

37. At CMS COP12, Parties had agreed to list the European Eel as a candidate for Concerted Action, with CMS, the SSC and Monaco taking the lead.

**CITES Activities (Animals Committee, Standing Committee and Workshop)**

38. Ms. Karen Gaynor (CITES) gave a background presentation on CITES and the listing of *Anguilla anguilla* on Appendix II of that Convention.
39. The listing of *Anguilla anguilla* had been agreed at CITES COP14 in 2007 but implementation had been deferred, entering into force on 13 March 2009. Trade could continue under Appendix II provided that a non-detriment finding (NDF) was made by the national scientific authority following a science-based risk assessment. Eels presented specific challenges, being panmictic and having multiple life stages, and there being no successful captive breeding nor an overarching management plan.

40. Within the EU, CITES was implemented through Wildlife Trade Regulations, which were stricter than the provisions of the Convention. The EU had imposed an export quota of zero, since which time illegal trade had increased as had trade in other Anguillid species.

41. CITES Decision 17.186 called for a study compiling information on challenges and lessons learnt regarding implementation of the Appendix II-listing of European Eels and its effectiveness. Dr. Gollock was leading this study. Furthermore, Decision 17.187 called on Range States to collaborate on other Anguilla species, for instance through holding workshops. One such workshop had been held at the Royal Botanical Gardens in Kew, London in April. The report from that workshop would also be submitted to the CITES Animals Committee.

42. A key role of the Animals and Plants Committees was to conduct reviews of significant trade, which normally examined a species in combination with key countries. An expert had been commissioned to investigate *Anguilla anguilla* in Morocco, Algeria and Tunisia, where large increases in exports of live and processed eels had been recorded in 2014/2015 compared with 2011/2012.

43. The CITES Animals Committee meeting on 16-21 July 2018 would look at the reports from the workshops. All three countries subject to the review had responded. Actions, if any were proposed, would be timebound, feasible, measurable, proportionate and transparent. It was proposed to hold a joint CMS-CITES side event on eels at the Animals Committee. The 70th meeting of the CITES Standing Committee would take place in Sochi, Russian Federation on 1-5 October 2018.

**HELCOM Eel Workshop**

44. Ms. Monika Stankiewicz, Executive Secretary of the Baltic Marine Environment Protection Commission (HELCOM) gave an account of the background of HELCOM and described its principal areas of work.

45. A workshop on eels had been held in Stockholm from 29 November to 1 December 2017, in collaboration with SWAM (the Swedish agency), CMS and SSC. This had covered a range of issues including monitoring stocks and the effects of hydro-power and monitoring.
Regional Fisheries Management Organizations (RFMOs)

46. Mr. Miguel Bernal of the General Fisheries Commission for the Mediterranean (GFCM) explained that the GFCM was part of the Food and Agriculture Organization of the UN. It had been established in 1949 and covered the Mediterranean and Black Seas, with 24 Parties (including the EU and Japan) and four cooperating non-Parties (Bosnia & Herzegovina, Georgia, the Republic of Moldova and Ukraine). The remit of the GFCM had been extended to cover brackish and intermediate waters, but rivers and inland reservoirs remained excluded.

47. A regional workshop on eels had been held in Tunisia in September 2010 and a joint working group had been set up with ICES and the EIFAAC – the WGEEL as described above.

48. At the 41st session of the GFCM in 2017, the status of the European Eel had been recognized as being critical, and it had been agreed to develop a management plan.

49. Recently, a dedicated technical meeting on eels had been held. Its findings were yet to be endorsed by the Commission’s Scientific Committee. Precautionary actions were being taken pending confirmation that the advice was being accepted.

50. Examples of management measures included specific fishing authorizations, temporal restrictions, catch limits and restrictions on the types of gear.

UNEP/Mediterranean Action Plan

51. Ms. Lobna Ben Nakhla (UNEP/MAP) gave a brief overview of the Barcelona Convention in relation to eels. She explained that the Specially Protected Areas (SPA) Protocol had three annexes. The first dealt with common criteria for the choice of protected marine and coastal areas that could be included in the list of Specially Protected Areas of Mediterranean Importance (SPAMI). The second concerned the list of endangered and threatened species and the third listed species the exploitation of which was regulated. *Anguilla anguilla* was on Annex III.

American Eel Workshop (April 2018)

52. Dr. David Freestone (SSC) summarized the outcomes of this workshop, which had been organized by the SSC, with support from the US Fish and Wildlife Service (USFWS) and the Canadian Fisheries and Oceans. Ten Range States had attended, but others had submitted reports and most had responded to the questionnaire that had been circulated.

53. Fishing for eels took place in much of Eastern Canada and in two US States (Maine and South Carolina). Some other Range States were uncertain whether American Eels were present in their waters. Canada was a major trading hub, and American Eels were shipped through Canada from a number of Ranges States, some of which, such as Belize, were unaware of any harvesting. The markets were in aquaculture ventures in China through Hong Kong. The cramped conditions in eel farms led to a higher percentage of males and the hormones were reported to be used to increase numbers of larger females, a practice which would probably be illegal in North America or the EU.
54. The shift in trade following the EU export ban had affected American Eel Range States, as other countries, including Caribbean Island States with large rivers (e.g. Cuba, the Dominican Republic, Haiti and Jamaica) filled the gap left by the EU. The USFWS and the Canadians had seized “lookalike” species wrongly labelled and extensive counter-smuggling operations were being conducted. The Japanese market for eels was driving prices up, with *Anguilla japonica* elvers selling for huge amounts in 2017. Large Chinese farming operations had turnovers of millions of dollars. Much of the trade was illegal.

**Actions Elsewhere**

55. Mr. Vladimir Koltunov (Belarus) provided a brief overview of the situation in Belarus, noting that, with 10,000 lakes, 318 of which provided ideal habitat, many located in National Parks, Belarus was an important Range State for eels. Otolovo Lake had been restocked with 96,000 units in 2007 and eels had been found in the connected waters afterwards. Several other lakes and reservoirs had also been stocked. The migration of silver eels took place in the spring (primarily May) and autumn (September). Dams in Lithuania blocked the Rivers Neris, which flowed into the Naroch Lake system and Neman. There was a glass eel facility at Vazha Lake (part of the Obsterno Lake group). In Belarus, eel fishing was licensed, and no amateur fishing was allowed. Eels were found mainly in National Parks. An Eel Resource Management Plan up to 2020 was in force.

56. Mr. Loureiro (Portugal) said that illegal trade was the main pressure on eels in Portugal and probably Spain and a great deal of work was being undertaken.

57. Mr. Laamiri (Morocco) commented on the figures provided for trade and said that there was a national management plan and trade in glass eel had been prohibited. Production and export of mature eels was based on aquaculture rather than taking animals from the wild.

**Question & Answer Session**

**VI. Results of survey on gaps in conservation and management of the species**

58. Ms. Virtue (CMS) presented the results of the survey undertaken among Range States. Of the 52 Range States consulted, 23 had submitted responses. The questions covered identified threats to eels, such as climate change, disease, pollution, barriers to migration, habitat loss, poor condition and exploitation. Predation did not figure highly. Range States were also asked to identify impediments to conserving eels, and lack of data, limited capacity and low levels of knowledge were the main problems. The existing mechanisms being used included CMS, CITES, the EU Management Plan, ICES, the GFCM and AdriaMed. Most countries responding expressed the view that an international instrument of some kind would be beneficial, as it could assist with knowledge sharing, capacity-building and collaborative research.

**VII. Exploring synergies between existing instruments, to solidify the role of CMS, and associated mechanisms of implementation in ongoing conservation efforts**

59. Professor Chris Wold (Lewis & Clark Law School) set out some of the options for an international agreement on the European Eel.
60. He said that some species such as eels slipped through the gaps between international treaties and were difficult to deal with because 1) no single treaty covered the full range of threats to the species and 2) due to their highly migratory nature, they crossed many different jurisdictional boundaries; thus, no single State or treaty covered the full range of the species (this was also the case with sharks and albatrosses for which CMS instruments existed). The European Eel had 57 Range States. Eels also faced a wide range of threats, such as overfishing, barriers to migration, habitat loss (especially land drainage), pollution, disease and parasites. Similarly, turtles, for which there were two CMS instruments, also faced multiple threats: bycatch in gillnets and long-line fishing, artificial lighting on nesting beaches, poaching and trade, making it difficult for a single treaty to address them comprehensively.

61. While CITES covered the High Seas, Exclusive Economic Zones, near-shore waters and freshwater habitats, it only dealt with international trade. UNCLOS dealt with the High Seas but the only threat it could address was taking (i.e. fishing). The ICCAT (the International Commission for the Conservation of Atlantic Tuna) was responsible for the Atlantic Ocean and adjacent seas but not for freshwater nor for eels that were not being caught alongside tuna or tuna-like fish species. The geographic scope of the GFCM extended only to the Mediterranean and Black Seas and could address only some of the threats, such as take, illegal, unregulated and unreported fisheries and trade. The Western Central Atlantic Fishery Commission had considerable overlap with the Sargasso Sea but its usefulness for eel conservation was limited. HELCOM was confined to the Baltic Sea.

62. The EU’s regulation on eels did not apply to non-EU Range States nor to the High Seas. It could, however, address most of the threats though implementation was devolved to the national level.

63. CMS could cover all waters and most of the threats, deferring on issues relating to international trade to CITES. There were already instruments in the CMS Family dealing with sharks, turtles and albatrosses and petrels. Membership of the daughter agreements was open to non-Parties (e.g. the USA and the Sharks Memorandum of Understanding) and there were seven legally-binding Agreements and 19 less formal Memoranda of Understanding (MOUs). CMS also had an established and experienced Secretariat, but finite capacity might restrict the additional tasks that it could take on without further resources.

64. Listing on Appendix I would prohibit the take and oblige Party Range States to endeavour to undertake certain actions. There might be opposition to banning taking by some Range State Parties, the provisions would not apply to non-Parties and Appendix I did not call for coordination of scientific research.

65. The species-specific Agreements foreseen arising from an Appendix II-listing lay at the heart of implementation of CMS.

66. Single-Species Action Plans also existed and usually originated from the Scientific Council. They did not normally contain a formal mechanism for coordination.
Article IV of CMS provided for two types of agreement, covering species listed on Appendix II or other species that crossed boundaries periodically. Originally, it was thought that all agreements would be binding, but Parties sought greater flexibility, which resulted in the creation of non-binding instruments. There had been successful examples of both binding and non-binding instruments. The binding or non-binding nature of the instrument usually contributed less to the success of an instrument than 1) the active engagement of the Signatory Range States and other stakeholders and 2) adequate and predictable funding. Binding Agreements were funded through mandatory contributions, while the MOUs relied on the Secretariat to raise voluntary contributions. Instruments contained provisions for reporting, developing a conservation plan and holding meetings of the Parties or Signatories. Binding Agreements had to be ratified and it could take several years for a sufficient number of Parties to complete the process, whereas MOUs could enter into effect upon signature at the final negotiation meeting. Theoretically, an MOU could be upgraded into a binding Agreement, but this had not happened so far.

Should CMS pursue an Agreement?

Professor Wold explained that Resolution 12.8 on the implementation of Articles IV and V setout 14 criteria for determining whether it was appropriate to pursue the option of having an instrument under CMS. The criteria asked, for example, whether an agreement served a COP mandate, enhanced synergies with other CMS initiatives, and had the support of a Range State or organization to take the lead in organizing negotiations and assisting with implementation of the agreement.

A mandate could be found in the CMS Strategic Plan Goal 3, Resolution 12.7 on ecological networks, Resolution 12.26 on connectivity. Resolution 11.27 on renewable energy and migratory species was relevant to fresh and hydropower and as was Resolution 10.12, which concerned migratory freshwater fish (38 per cent of all freshwater fish in Europe were threatened). Protecting the Sargasso Sea would help other CMS species (turtles, dolphins, sharks) and would be consistent with its status under CBD as an EBSA.

As Range States had agreed to a follow-up workshop and the IUCN, the SSC and the ZSL were all engaged in the process, there seemed to be sufficient interest in pursuing the option of a mechanism under CMS.

Mr. Mohamed Badr Laamiri (Morocco) said that, in Morocco, because the legal eel fisheries were properly controlled, the problems arose from illegal trade. Legal exports were conducted in accordance with CITES regulations. There was a need for international cooperation. National fisheries scientists had considered historical catch figures and examined the many artisanal fisheries operating. It was confirmed that the figures cited came from TRAFFIC and could refer to illegal trade.

Ms. Gaynor (CITES) said that the CITES Animals Committee took at face value the figures presented to it. All eels were considered to be wild and there was no way of telling whether specimens were captive-bred. In response to the review, Morocco had provided satisfactory responses and it should be understood that a country being subject to a review did not imply any accusation of wrong-doing.

Dr. Reinhold Hanel (Germany) said that it should be easy to calculate how many eels had been exported given the figures of two tonnes of glass eels being caught. Another question was whether a catch of that size was sustainable.
74. Mr. Bernal (GFCM) said that a key point was the effectiveness of implementation and not the nature of the obligation and asked how any new instrument would actually be implemented. The position of the Parties in the GFCM was that a management plan for eels was urgently needed.

75. Professor Wold explained that listing under CMS Appendix II per se did not create any obligations, which only arose when the instrument took effect. How Parties were held to account also depended on the provisions of the instrument, with some of them having a compliance mechanism. CITES had such a mechanism and one was evolving under CMS. Resources could also be made available to promote capacity-building activities.

76. Mr. Koltunov (Belarus) explained that Belarus had been undertaking stocking measures, but there was a great debate about how successful these were. He recognized that the political will to act on eels was low. A three-month ban on eel fishing over a six-month period had been suggested, and all countries had chosen November to January, which was designed to be least disruptive to fishers and was also the least effective for eel conservation. The easiest area to seek solutions was fisheries, where quotas could be set and compensation paid. No country was willing to take the first step and put its fishers at a disadvantage. The aim should be to find sustainable solutions involving all stakeholders.

77. Ms. Evangelia Georgitsi (European Union) said that it was important to consider whether any instrument was legally binding or not, but more relevant were the actions to be taken. At the Galway workshop, it had been made clear that the EU had competence for its Member States and the gaps in coverage lay in North Africa and the lack of protection in the Sargasso Sea. Legal complexities would arise in seeking to enhance protection in ways that infringed existing rights of fishers. With regard to non-EU countries, the GCFM which had a comprehensive plan covering them was one of several bodies operating in the Mediterranean.

78. Professor Wold suggested comparing EU legislation with that of other Range States. Securing harmonization of legislation on fisheries and pollution might be an aim.

79. Dr. Freestone (SSC) agreed that the Sargasso Sea was a major gap. He recognized that the EU was conducting a review but there were important non-EU Range States. It was important to draw all the threads together and develop a tailored response.

80. Ms. Stankiewicz (HELCOM) said that there were experiences under ASCOBANS, which had a series of resolutions on noise. These resolutions complemented actions being taken under HELCOM. A scoping exercise to identify the gaps that need to be filled should be undertaken to ensure complementarity and avoid duplication.

81. Mr. Fleming (UK) saw a role of an instrument under CMS in drawing the threads together, involving the non-EU Range States and the destination countries in Asia and covering the High Seas.

82. Professor Roe said that there was consensus that the eels were endangered and there was a basic understanding of their life cycle. It was vital to engage in the debate over the management of the High Seas to protect the eels’ spawning grounds. If eels could not spawn, there would not be any more eels.
83. Professor Wold cautioned that the UN process of negotiations over the High Seas was unlikely to reach a conclusion very soon. The Chair said that the first stage of negotiations would start in September, but finalization of a text, ratification and entry into force would take some time after that. Nonetheless, engaging in this process was essential.

Possible Elements of an Instrument

84. Professor Wold explained that any instrument should cover the entire geographic range of the species (or sub-species) or family of species. Some flexibility could be provided allowing for further species to be added. The instrument could address the taking of the species, taking into account CITES and RFMO regulations, but allowing Parties/Signatories to adopt stricter measures. A catch document scheme (CDS) to ensure traceability from the time an eel was caught to reaching the market was an option for allowing some harvest but also ensuring the legality of trade. There was a small amount of long-line fishing taking place in the Sargasso Sea targeting tuna and there was no evidence of eels ever being caught there. Consideration could also be given to measures relating to shipping, if the amount or routes of maritime traffic was thought to be causing problems.

Institutional elements

85. Professor Wold noted that a CMS instrument would benefit from an advisory or scientific body. Advisory and scientific bodies already existed under the aegis of ICES and IUCN. Scientific expertise could be enhanced with the addition of other fields such as fisheries management. One West African RFMO contracted outside organizations to provide advice on specific issues.

86. Secretariat services could be provided by CMS as it did for the Sharks MOU but additional resources would be needed. Alternatively, one of the Range States or a body such as the SSC could take the lead (as Monaco did with ACCOBAMS and the IUCN did with the Ramsar Convention).

87. Other examples from the CMS Family could give an indication of the likely costs involved, but there were unlikely to be direct parallels with different Range States and combination of developed and developing countries. The best comparisons were provided by the Sharks MOU and IOSEA Marine Turtle MOU, both of which cost US$1 million per triennium for staff, meetings and some project work.

88. Other criteria set out in Resolution 12.8 included the number of official languages, which in the case of eels would be English and possibly French and Arabic. A challenge was to overcome political inertia. It was also too early to estimate the effectiveness of the measures proposed. The impacts of the EU ban on trade were not clear, nor the repercussions for non-EU countries.

Question & Answer Session

89. Dr. Russel Poole (Ireland) asked what the response would be to a review after 6-9 years of management, and how Parties should adapt if it were found that their courses of action had been ineffective. Professor Wold said that CMS Action Plans were meant to be iterative documents, and even legally binding instruments were dynamic, not static.
90. Mr. Andras Demeter (European Union) said that CMS also had a role in raising awareness and undertaking outreach activities. Professor Wold agreed, stating that CMS cooperated with NGOs that engaged in the work of the instruments and these NGOs often took the lead on awareness-raising.

91. Mr. Nils Höglund (Coalition Clean Baltic) said he represented an organization with a large membership of NGOs across the Baltic, many of which actively undertook public relations work. The eels were being fished and were critically endangered because of human interventions. Eel fishermen would be affected, if fishing was restricted and it was essential to bring them on board. There were few obvious alternatives as other species had also disappeared. He added that the possible impacts of sea bed mining should also be taken into account. Two years after the Galway meeting, the European Eel was still endangered, and CMS should be raising the issue of its conservation in wider forums.

VII. Development of conclusions, next steps, adoption of action points and closure of the Meeting

92. The Chair had prepared a bullet-point summary which was displayed onscreen for comment covering the following areas: Jurisdictional needs; Imperatives for international cooperation; opportunities to complement existing regimens and fill gaps; and other considerations.

93. Mr. Koltunov (Belarus) stressed the need for an international agreement for Anguillid species, embracing all Range States and the SSC. Belarus was preparing a national management plan for eels and would like some guidance. Ideally, Belarus would develop a joint management plan with Latvia, Lithuania, the Russian Federation and Ukraine.

94. Dr. Gollock (IUCN) said that anguillid eels would be reassessed under the IUCN Red List later in 2018 for publication in 2019.

95. Mr. Bernal (GFCM) said that it was necessary to add habitat loss to the threats.

96. Mr. Fleming (UK) said that inland waterways were just one area for jurisdiction. He questioned whether shipping was a threat to eels and stressed that an agreement on eels should not aim at protecting the Sargasso Sea per se but would focus on the eels’ spawning grounds.

97. Dr. Hanel (Germany) agreed that protecting the Sargasso Sea was important but it was not clear where precisely the spawning grounds were. Shipping was not likely to be a major threat; when he last spent some time there, he only saw a few other vessels. It was, however, suggested that a major oil spill could have devastating effects.

98. Mr. Demeter (European Union) said that barriers to migration were found in inland waters and freshwater habitats were being lost.

99. Mr. Höglund (CCB) said that deep seabed mining was a threat and was being raised in other forums. Recreational fishing in inland waters tended to fall under national competence and had a high impact in certain countries. When the European Eel was listed, there appeared to be a chance for added effort beyond national and EU-wide measures efforts. National efforts if not coordinated could be negated by the actions of neighbours. Coordination and addressing threats across the board were essential.
100. Mr. Bernal (GFCM) said that Mediterranean habitats were being degraded.

101. Ms. Virtue (CMS) said that a distinction should be made between issues that could be dealt with locally and those needing international cooperation.

102. Dr. Hanel (Germany) said that the Water Framework and Marine Strategy Framework Directives covered all these issues in the EU. However, neither made a specific reference to eels and neither applied to non-EU States. EU Member States were also already obliged to prevent barriers to migration. Mr Demeter said that these two instruments were very broad tools, but the Water Directive did call for water management plans and encouraged EU Member States to cooperate with non-EU neighbours, although this would not help with North African countries.

103. Ms. Sporrong (Fisheries Secretariat) suggested extending the CMS energy task force to cover hydro power given its effect on eels.

104. Mr. Bernal (GFCM) said that the gaps where no existing forums provided adequate coverage should be identified. He cautioned against creating an instrument which duplicated the work of others. He warned that the GFCM did not have a comprehensive mandate but there was a coordination mechanism. He felt that it was not necessary to create an instrument dealing with issues covered elsewhere.

105. Mr. Fleming (UK) said that the discussion was becoming bogged down in the detail of whether a given area or activity was already dealt with in another forum. He requested that the headings of the document be streamlined and the meeting consider the coverage of existing mechanisms, recognizing that there was no single instrument dealing with all issues relevant to eels. A new instrument should deal with the High Seas, and coastal and inland waters, but the imperatives for international cooperation should be identified. Some “SMART” targets for goals beyond restoring the eel population were needed for the next five-year period with countries using all the current means at their disposal to reduce mortality and start to address the top ten threats.

106. Mr. Laamiri (Morocco) said that technical guidelines and success stories from other countries would be helpful and the Chair said that such issues could be covered under capacity-building.

107. Dr. Poole (Ireland) said that there were two main aims: to halt and reverse the decline of the species in the first instance and then move to managed, sustainable use in the future. More information would be available after the reviews had been completed. It was necessary to reduce mortality and improve the stock. Reducing fishing and hydro power both had economic implications. In the longer term, a management plan for sustainable use would be needed, but this was inappropriate given the present status of the species.

108. Ms. Viker (Sweden) agreed that international cooperation was essential and that CMS was an appropriate forum.

109. Ms. Sporrong agreed that appropriate provisions existed, but they were scattered across different legislation. CMS could provide a focus.
110. Ms. Georgitsi (European Union) agreed with the representative of GFCM that a new instrument was not necessary but existing means for cooperation should be used without creating another layer with no added value. The policy area was one for which the European Union had exclusive competence.

111. Mr. Loureiro (Portugal) cited the example of the illegal taking, killing and trade of birds in the Mediterranean (MIKT), an initiative of CMS conducted with the Bern Convention, where all partners had their niche and played their role.

112. Mr. Demeter agreed with his colleague from DG Mare over EU competence but CMS was an environment treaty. He recognized that eels were a natural resource in a critical state, and that the range of stakeholders was broad. Streamlining and avoiding duplication and contradictions were important. It was necessary to bring some order to a chaotic and complicated landscape. Many reviews and studies were pending, and a clearer picture would emerge when these were published. Urgent action was needed and he suggested drawing up a scoping paper portraying the existing instruments and mandates.

113. Mr. Bernal said that in his experience the problem of lack of coordination started within national authorities. In the Mediterranean, the aim was for the stock to recover to the point where it would be safe to exploit it again. The Chair said that falling into a “silo mentality” was a common problem and agreed that addressing non-EU States was important.

114. Ms. Georgitsi (European Union) asked what added value would be achieved in repeating already agreed goals under a new instrument concluded under CMS. A monitoring and review mechanism, to take stock of the actions and their effects might be worthwhile, as CMS could then see what was happening in the Range States as a result of the listing on Appendix II. The input of scientists, managers and industry should be sought. An assessment could be made of how effective the measures taken were and whether more needed to be done.

115. Ms. Simonaityte (Lithuania) said a common understanding of what Range States wanted to achieve was needed. Current measures and targets for EU and non-EU countries should be identified. Regarding international cooperation, Lithuania and Poland had some experience of working with Belarus and Ukraine. The EU trading ban had affected restocking programmes.

116. Mr. Bernal asked about the implications of CMS Appendix II-listing. The status of the species should be monitored to ascertain that it still qualified for listing. He said that existing mechanisms should be examined to see if they provided adequate measures for the eel. It might well be the case that a fresh international initiative was needed for the Sargasso Sea.

117. Mr. Höglund (CCB) advocated a coordination and review mechanism under CMS to review existing mechanisms and agreed that the Sargasso Sea needed to be the focus of attention. He asked whether CMS was well placed to deliver this aspect.

118. Mr. Demeter added that it was not only Parties but other international bodies that had to deliver. With the Sargasso Sea being an EBSA, CBD had an interest. As scientific research was likely to be expensive, he asked whether CMS could help secure funding.
119. Dr. Freestone (SSC) recalled the North Sea conferences held in the 1980s which had resulted in the OSPAR agreement. A similar process was needed for the Sargasso Sea. The SSC was working with many different authorities and through the Hamilton Declaration the Signatories had agreed to coordinate policy. The SSC was also looking for new funding streams.

120. Dr. Chambers (CMS) said that the Convention on Migratory Species had at its disposal tools for coordination and monitoring as a convening body bringing together Parties, IGOs and NGOs. CMS was part of the Biodiversity Liaison Group with other MEAs and was one of the key operationalizing instruments for CBD. The Convention had a Scientific Council with national experts and COP-appointed specialists and dealt with awareness-raising and capacity-building.

121. Dr. Hanel said that there had been no monitoring in the Sargasso Sea, and any projects to do so would not be too costly, especially if several countries shared the expenses.

122. Professor Wold reflected on 20 years of experience and how policy fragmentation took effect. He said the idea of reviewing implementation was appealing, as there was a need for better policy compatibility and building synergies, and linking to the Aichi Targets of CBD and the SDGs. Targets for eels should be set across the entire range and not just in the EU. On science, he suggested compiling a list of the top five questions and identifying people that could best answer them.

123. Mr. Vlietinck (Belgium) raised the issue of whether an instrument under CMS should also deal with other Anguillid species.

124. Dr. Freestone (SSC) recalled that at the Galway workshop, experts from North America had been present. At that time, it appeared that levels of knowledge and activity were greater in Europe, but in the meantime the USA and Canada had caught up. The question of which species were covered by an instrument could be dealt with by having a separate annex which could be easily amended. The complexities of the trade issue meant that eel conservation had a global dimension affecting all Anguillid species.

125. Dr. Gollock advocated as open an approach as possible to facilitate the exchange of information, but suggested focusing on the species listed by CMS.

126. Dr. Poole suggested using CMS as a repository for technical support and a clearing house. A problem encountered with ICES was that it held large amounts of data but it was not always easy to access them and make them more readily available.

Opportunities to complement existing regimens and fill gaps

127. The Secretariat projected the draft text on screen which included a new introductory and closing paragraph and a summary of the earlier session’s discussions. Amendments agreed by the meeting were incorporated into the final version.

128. The result of the discussion was the outcomes document which the Secretariat undertook to finalize and publish the next day as soon as possible on the CMS website dedicated to the Malmö workshop. The Secretariat undertook to consult Range States over the mechanics of the next steps.
Closure of the Meeting

129. The Chair thanked all the participants for their engagement at the meeting. Dr. Chambers (CMS) and Dr. Freestone (SSC) expressed satisfaction at the progress made and after further customary expressions of gratitude to all that had contributed to the success of the meeting, the workshop was declared closed.
LIST OF PARTICIPANTS

Chair
Staffan Danielsson
Ministry for the Environment and Energy, Sweden
Regeringskansliet, 103 33 Stockholm, Sweden
staffan.danielsson@gov.se

Range States

Algeria

Mohamed Hadjeloum
Chef du bureau de la Gestion et de la Protection de la Faune Sauvage,
Direction Générale des Forêts,
P.O. Box 232, Hydra, Algeria
hadjeloum@yahoo.fr

Belgium

Kristof Vlietinck
Agency for Nature and Forest,
Flanders, Belgium
Havenlaan 88 bus 75, BE 1000 Brussels, Belgium
Kristof.vlietinck@vlaanderen.be

Belarus

Oleg Borodin
SPC NAS of Belarus for biological resources,
Akademicheskaja str., 27, Minsk, Belarus
oleg.borodin@yahoo.com

Vladimir Koltunov
SPC NAS of Belarus for biological resources,
Akademicheskaja str., 27, Minsk, Belarus
oleg.borodin@yahoo.com

Denmark

Lene Scheel-Bech
Ministry of Foreign Affairs of Denmark,
Fishery Policy Unit
Asiatisk Plads 2, 1448 Copenhagen K, Denmark
lesche@um.dk
European Union

András Demeter
Directorate-General for the Environment, European Commission,
B-1049 Brussels, Belgium
andras.demeter@ec.europa.eu

Evangelia Georgitsi
Directorate-General for Maritime Affairs and Fisheries, European Commission
B-1049 Brussels, Belgium
Evangelia.georgitsi@ec.europa.eu

Germany

Reinhold Hanel
Thünen Institute/Ministry for Food and Agriculture,
Palmaille 9, 22767 Hamburg, Germany
reinhold.hanel@thuenen.de

Ireland

Russell Poole
Marine Institute, Fisheries Ecosystems Advisory Services (FEAS)
Furnace, Newport, Co. Mayo, Ireland
russell.poole@marine.ie

Lithuania

Jolanta Cesiuiliene
Fisheries Service under the Ministry of Agriculture of Lithuania
J. Lelevelio str. 6, 01102 Vilnius, Lithuania
jolanta.cesiuliene@zuv.lt

Agne Razmislaviciute-Palioniene
Ministry of Agriculture of Lithuania
J. Lelevelio str. 6, 01102 Vilnius, Lithuania
agner@zum.lt

Laura Simonaityte
Ministry of Agriculture of Lithuania
Jaunystes str. 85, 14121 Vilnius, Lithuania
lauras@zum.lt

Luxembourg

Carole Molitor
Ministère du développement durable et des infrastructures
4, Place de l'Europe,1499 Luxembourg
carole.molitor@eau.etat.lu

Morocco

Mohamed Badr Laamiri
Haut Commissariat aux Eaux et Forêts et à la Lutte Contre la Désertification
3, rue harroune Errachid, Agdal, Rabat, Maroc
laamirimb@gmail.com

Netherlands

Sjaak Vonk
Ministry of Economic Affairs and Climate Policy
Bezuidenhoutseweg 73
2594 AC The Hague, The Netherlands
j.b.f.vonk@minez.nl

Portugal

João Loureiro
Institute of Nature Conservation and Forests, ICNF
Avenida da Republica,16-1050-191 Lisboa, Portugal
joaoloureiro@icnf.pt
Sweden

Jens Persson
Swedish Agency for Marine and Water Management
PO Box 11930
40439 Göteborg, Sweden
Jens.persson@havochvatten.se

Susanne Viker
Swedish Agency for Marine and Water Management
PO Box 11930
40439 Göteborg, Sweden
susanne.viker@havochvatten.se

Ukraine

Hryhorii Parchuk
Ministry of Ecology and Natural Resources of Ukraine
35 Metripolyta V.Lypkivskogo Str., Kyiv, 01042, Ukraine
parks@menr.gov.ua

United Kingdom

Vincent Fleming
Joint Nature Conservation Committee,
Monkstone House
Peterborough PE1 1JY, United Kingdom
Vin.fleming@jncc.gov.uk

Invited Experts

Matthew Gollock
Zoological Society of London
Regent’s Park
London E17 8HB, United Kingdom
Matthew.gollock@zsl.org

Ronan Long
Global Ocean Institute, World Maritime University
Fiskehamnsgatan 1, 20124 Malmö, Sweden
rl@wmu.se

Howard Roe
Sargasso Sea Commission
Barton Mere, Barton Court Avenue,
Barton On Sea, BH25 7HD,
United Kingdom
howard_roe@hotmail.com

Alan Walker
Cefas/ICES
Pakefield Road,
Lowestoft, Suffolk, NR33 0HT
United Kingdom
Alan.walker@cefas.co.uk

Chris Wold
Lewis & Clark Law School
10015 SW Terwilliger Blvd., Portland,
Oregon, USA
wold@lclark.edu
Observers

IGOs

CITES
Karen Gaynor
The Convention on International Trade in Endangered Species of Wild Fauna and Flora
International Environment House, Chemin des Anemones 11-13, CH-1219 Chatelaine, Geneva, Switzerland
karen.gaynor@cites.org

FAO-GFCM
Miguel Bernal
General Fisheries Commission for the Mediterranean (GFCM) Food and Agriculture Organization of the United Nations (FAO)
Palazzo Blumenstihl, Via Vittoria Colonna 1, 00193 Rome, Italy
miguel.bernal@fao.org

HELCOM
Monika Stankiewicz
Helsinki Commission
Katajanokanlaituri 6 B, 3rd floor, FI-00160 Helsinki, Finland
monika.stankiewicz@helcom.fi

UNEP/MAP/SPA-RAC
Lobna Ben Nakhla
UNEP/MAP/Specially Protected Areas Regional Activity Center
Bd. Leader Yasser Arafat, 1080 Cedex Tunis, Tunisia
lobna.bennakhla@spa-rac.org

World Maritime University
Cleopatra Doumbia-Henry
World Maritime University
Fiskehamngatan 1, SE-20124, Malmö, Sweden
cdh@wmu.se

Larry Hildebrand
World Maritime University
Fiskehamngatan 1, SE-20124, Malmö, Sweden
lh@wmu.se

Elnaz Barjandi Malagic
World Maritime University
Fiskehamngatan 1, SE-20124, Malmö, Sweden
elm@wmu.se
NGOs

Coalition Clean Baltic
Nichlas Höglund
Coalition Clean Baltic
Östra Ågatan 53
SE-753 22 Uppsala
Sweden
Nils.hoglund@ccb.se

Greenpeace Nordic
Magnus Eckeskog
Greenpeace Nordic
Njalsgade 21G, 2. sal
2300 Copenhagen S,
Denmark
magnus.eckeskog@greenpeace.org

Sargasso Sea Commission
David Freestone
Sargasso Sea Commission
1630 Connecticut Ave. NW #300,
Washington, DC 20009,
United States
dfreestone@sargassoseacommission.org

Teresa Mackey
Sargasso Sea Commission
1630 Connecticut Ave. NW #300,
Washington, DC 20009,
United States
tmackey@sargassoseacommission.org

CMS Secretariat
Bradnee Chambers
UN Environment/CMS
Platz der Vereinten Nationen 1
53113 Bonn, Germany
Bradnee.chambers@cms.int

Robert Vagg
UN Environment/CMS
Platz der Vereinten Nationen 1
53113 Bonn, Germany
Robert.vagg@cms.int

Andrea Pauly
UN Environment/CMS
Platz der Vereinten Nationen 1
53113 Bonn, Germany
Andrea.pauly@cms.int

Melanie Virtue
UN Environment/CMS
Platz der Vereinten Nationen 1
53113 Bonn, Germany
Melanie.virtue@cms.int

Tine Lindberg-Roncari
UN Environment/CMS
Platz der Vereinten Nationen 1
53113 Bonn, Germany
Tine.l-roncari@cms.int

The Fisheries Secretariat
Niki Sporrong
FishSec
Prästgatan 9, 111 29 Stockholm,
Sweden
niki.sporrong@outlook.com