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ANALYSIS OF THE EXPERTISE OF MEMBERS OF THE SCIENTIFIC COUNCIL

(Prepared by the Secretariat)

1. This document represents a review of the existing expertise within the Scientific Council, the body established under Article VIII of the Convention to provide advice on scientific matters. Identification of the current capacities of the Council assist the selection of those Councillors most suited to advise on a certain species, project or agreement and also facilitate in turn the identification of areas for which external experts may be needed. Addressing these factors will not only enhance the effectiveness of the Council but also that of the overall Convention itself.

Relevant meetings and reports

2. The need for an analysis of the scientific expertise of the Council's current membership was proposed and agreed during the 15th Meeting of the Scientific Council (Rome, 27-28 November 2008) and re-iterated during the 16th Meeting (Bonn, 28-30 June 2010).

3. To facilitate such a review, a questionnaire (UNEP/CMS/ScC16/Doc.5 Annex 1) was prepared to provide a comprehensive analysis of the diverse knowledge and experience possessed by the Council. The questionnaire was drafted by the Secretariat and revised by the Council at the 14th Meeting of the Scientific Council (Bonn, 14-17 June 2007) and Scientific Council Activity Planning Meeting (Bonn, 13 June 2009) (UNEP/CMS/ScCAP/Doc.2).

4. This review will provide the data to inform the database of expertise set-up by the Secretariat at the 16th Meeting of the Scientific Council (UNEP/CMS/ScC16/Inf.2), as requested by the Council at the 14th Meeting (Bonn, 14-17 June 2007).

Results of Analysis of Scientific Council Expertise

5. Forty-five out of the total of 103 councillors (inclusive of councillors, appointed councillors and alternate members; status October 2011) responded to the questionnaire (see UNEP/CMS/ScC17/Inf.20). The number of councillors per region who responded to the questionnaire is shown in Table 1 below. Most questionnaires were collected at the 16th Meeting of the Scientific Council (June 2010); however, late submittals were still being accepted up until February 2011. As a result of less than 50% of the Scientific Council



participating in the survey, the results presented in this paper have to be viewed as preliminary and not representative of the entire forum.

Region	Scientific councillors		
_	surveyed (nominal)	surveyed (%)	total (nominal)
Africa	9	20	25
Americas	7	16	13
Asia	7	16	16
Europe	20	44	42
Oceania	2	4	7
Total	45	100	103

Table 1: Number of total and surveyed councillors by geographic region

6. Topics covered in the assessment were: knowledge of languages, employment background and focus of expertise (geographic region, taxonomic group(s), habitat type, threats and human-induced impacts). The comprehensive set of data collected during this study can be obtained from the Secretariat, with additional information regarding the individual councillors who participated in this assessment included in UNEP/CMS/ScC17/Inf.20. With respect to geographic regions and habitat areas, the annex to the questionnaire (UNEP/CMS/ScC16/Doc.5 Annex1) explicitly states the countries and habitat classes considered under each item shown in the graph. The main findings of the assessment are included below.

a) Languages: The majority of councillors were fluent in one or two of the official UN languages (Figure 1). Most councillors were fluent in English, and it remains the most widely spoken UN language. Nevertheless, all the UN languages, with the exception of Chinese, were spoken in the Council. In addition, relatively few Councillors spoke Arabic.

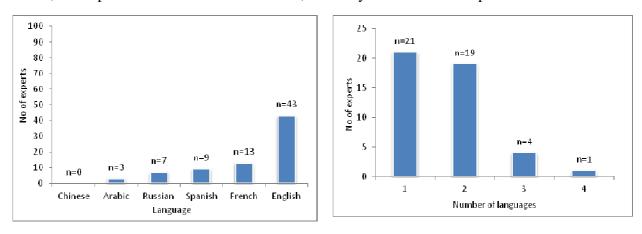
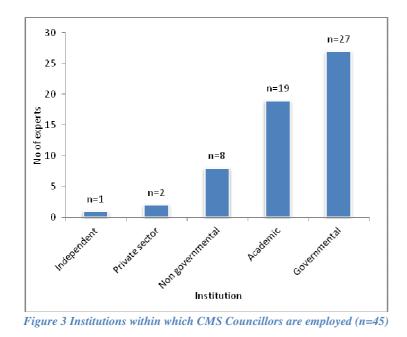


Figure 1 Language fluency of CMS Scientific Council (n=45)

Figure 2 Number of UN languages spoken fluently by scientific councillors (n=45)

b) Institutions: The majority of councillors worked within their respective governments and within academia (Figure 3). Relatively few councillors were employed in the private sector, independent work and non-governmental organizations (NGO). It was noted during this assessment that most of the councillors who worked on independent or NGO-run projects were employed in the academic sector.



c) Understanding of taxonomic groups: Councillors possessed knowledge on all taxa listed in the CMS Appendices, albeit to varying degrees. The taxonomic knowledge of the Council coincided with the taxonomic composition of the CMS Appendices to some extent. For example, councillors had greater knowledge of bird species compared to other taxa, and birds comprise the majority of listed species in the Appendices, whereas the distinct lack of knowledge regarding insects in the Council body also correlated with the composition of the Appendices as only 1 insect species is listed. The Council was not, however, very experienced with marine mammals although they comprised approximately 80% of all listed taxa (with birds excluded) within the appendices.

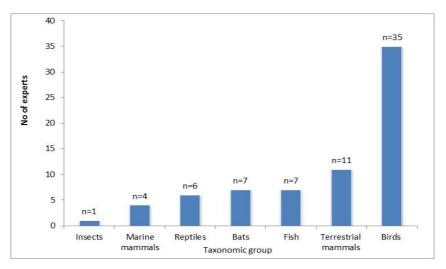


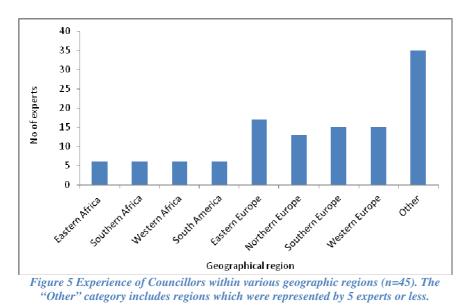
Figure 4 Experience of Councillors with the taxonomic groups listed in CMS Appendix I and II (n=45)

d) Geographical Regions: Figure 5 demonstrates councillors' experience within various geographic regions. As stated previously, the list of countries included within each geographic region is included in the annex to the questionnaire (UNEP/CMS/ScC16/Doc.5 Annex1).

The Council had considerable expertise in Europe, followed by several regions of Africa and the southern region of the Americas.

The "Other" category comprised regions for which the Council had limited or no knowledge (0-5 experts). Councillors had limited experience in North and Middle Africa, the Americas (excluding South America), as well as Asia in its entirety. In addition to these regions, there was a lack of knowledge pertaining to Antarctica and the island states and territories listed in the "Other Areas" category of the annex to the questionnaire (UNEP/CMS/ScC16/Doc.5 Annex1), the Caribbean, and the Oceanic area (Melanesia, Micronesia, Polynesia, Australia and New Zealand).

During this assessment, it was noted that most councillors were experienced with either 1 or 2 geographical regions, although a sizable number had experience with 5 areas. It was also noted that the region comprising a councillor's country of origin was typically listed as a geographic region of expertise.



e) Aquatic regions of expertise: Figure 6 demonstrates councillors' experience within specifically aquatic regions. As stated previously, the list of specific water bodies considered within each region is included in the annex to the questionnaire (UNEP/CMS/ScC16/Doc.5 Annex1).

The Council had considerable knowledge of European and African inland-waters (Figure 6). However, the Council had limited or no experience (0-5 experts) with regard to the remaining categories of aquatic region listed in the annex to the questionnaire (UNEP/CMS/ScC16/Doc.5 Annex1) and these are listed in the "Other" category in Figure 6. Aquatic regions for which the Council had no experience were Oceanic inland-waters and several Pacific water bodies (Western Central, Northeast, and Southeast). These were water bodies bounded by geographic regions for which the Council had little experience (Australia & New Zealand, Asia and the Americas).

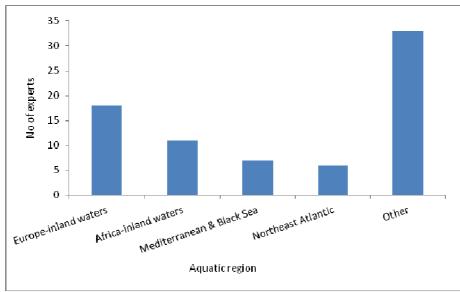


Figure 6 Expertise of the council members in various aquatic regions (n=36). The "Other" category included aquatic regions which were represented by 5 experts or less.

f) Habitats: Figure 7 illustrates councillors' understanding of different habitats and the associated fauna and flora. The list of habitat types/classifications considered in this analysis is included in the annex to the questionnaire (UNEP/CMS/ScC16/Doc.5 Annex1).

As shown in the figure, most councillors were experienced with forests and wetlands. The Council also had considerable experience on grassland, marine (neritic, oceanic, deep benthic, intertidal and coastal), rocky, savannah and desert areas. Introduced vegetation and caves and subterranean habitats (non-aquatic) were poorly-represented with only two and three councillors stating expertise for each category respectively.

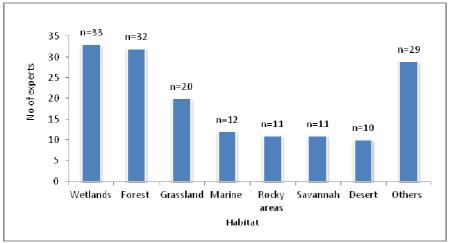


Figure 7 Experience of Councillors on different habitats important for CMS-listed species (n=45). The "Other" category included habitats which were represented by less than 10 experts.

g) Research Areas/ Areas of Specialization: The top five areas of expertise of councillors, illustrated in Figure 8, correlated with the main functions of the Council i.e. research, conservation/management strategies for migratory species and their listing on the CMS appendices. Several categories were also listed as "Other" due to their poor representation within the Council (10 experts or fewer).

In terms of human-induced impacts, the majority of councillors participating in the survey focused on habitat destruction and climate change, with hunting and invasive species a close second. Nevertheless, there was limited focus on certain impacts (e.g. ship collisions, oil pollution, electrocution, wind turbines, acoustic and light pollution) and these were listed in the "Other category" (10 experts or fewer).

The list of publications and reports with respect to the CMS-related work of the councillors who participated in this assessment is presented inUNEP/ CMS/ScC17/ Inf. 20.

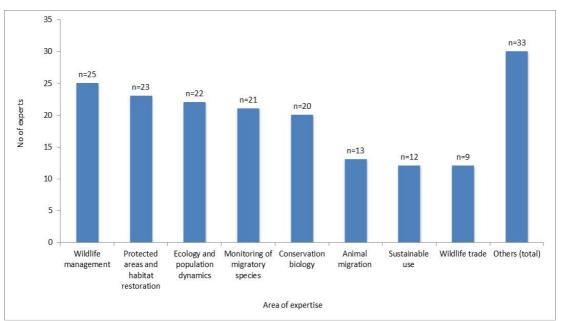


Figure 8 Scientific/ Research focus of the Councillors (n=45). The "Other" category included areas of expertise which were represented by less than 10 experts.

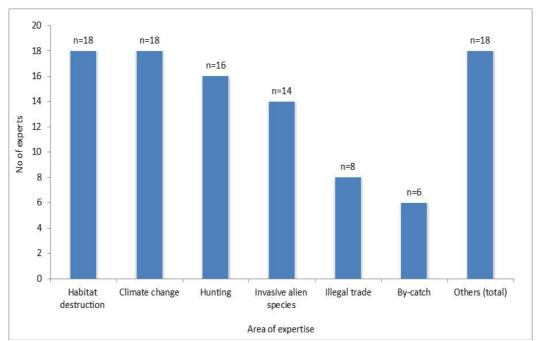


Figure 9 Recent scientific focus (Human induced impacts) of the CMS Scientific Council members (n=45). The "Other" category included areas of expertise in terms of human-induced impacts which were represented by less than 10 experts.

7. Several point should be taken into account regarding the factors which led to the abovementioned preliminary results:

- a) It is understandable that most councillors worked for government departments (Figure 3) since CMS directly engages with governmental and ministerial levels.
- b) The area of expertise of councillors is often connected to their duties in government and academic sectors (Figure 3) and this may have influenced their areas of expertise. For example, most councillors had experience in areas which comprised their countries of origin (Figure 5). Of note, is that most councillors participating in the survey were European and Europe was thus a foremost geographic and aquatic region of expertise, followed by Africa (Figure 5).
- Wetland/ forest conservation (Figure 7) and climate change mitigation/ adaptation (Figure 9) have become foremost items on the policy agenda of many countries in recent years and were also well-represented in the Council's expertise.
- d) Interestingly, the expertise of the councillors' appears to be linked to the species composition of the CMS Appendices. This trend was reflected in the taxonomic areas of expertise within the Council (Figure 4). Most notably, the Council exhibited considerable knowledge on avian ecology, and birds are the well-represented taxa listed in the appendices.
- e) A possible explanation for the poor representation of the Chinese language in the Council is that Chinese is not an official working language of any of the Parties to the Convention.

8. While the survey covers less than half of the Scientific Council and the results are therefore only indicative, several disparities were noted:

- a) The Council appears to be lacking expertise on marine mammals (Figure 6), despite these taxa being the second most-abundant group listed in the appendices (following birds). Fish also appeared to be poorly represented.
- b) In terms of habitats, the Council may be lacking expertise on aquatic regions (Figure 6) and marine habitats (Figure 7).
- c) In terms of anthropogenic threats, there appear to be few experts on pollution and the impact of infrastructure on migratory species, including energy development.
- d) Several bat species are listed in the Appendices; however, the Council had limited experience regarding caves and subterranean habitats.
- e) The understanding of the mechanisms of animal migration could be strengthened.

Action requested:

The 17th Meeting of the Scientific Council is invited to:

- a. Take note of the results of the survey presented;
- b. Consider addressing the potential gaps in its scientific expertise, for example through encouraging the participation and input from suitably qualified scientists and by building up stronger regional networks; and
- c. Ensure that those Scientific Councillors which have not yet participated in the survey submit their questionnaire to the Secretariat in order to obtain survey results which are representative of the entire Council.