## Elements for Terms of Reference for activities concerning connectivity of the Sessional Committee's Programme of Work

	Mandate	Activity	Expected Output	Elements for Terms of Reference
Dec. 13.114	The Scientific Council is requested, subject to the availability of resources, to undertake the following tasks for enhancing the scientific understanding of connectivity issues in relation to migratory species:  a) review the scope for existing major databases to support relevant analyses and syntheses of information on connectivity, and identify options inter alia for ensuring sustainability and enhanced operability and coordination of such databases for this purpose;	Identify suitable partners and potential donors to undertake it; upon successful fundraising, oversee production of the review and draw conclusions/recommendations as appropriate	Review Undertaken	<ul> <li>Define some broad criteria for identifying relevant databases, eg those holding data on migratory movement patterns of particular species groups; spatial distribution data of migratory species/important sites/habitats; distribution of threats to connectivity (eg linear infrastructure, habitat fragmentation), trends in threats to connectivity; databases that are sufficiently international in scope to encompass information of relevance to migratory connectivity; etc.</li> <li>Initial identification of potentially relevant "major databases" against the criteria above, in consultation with expert groups eg UNEP-WCMC (WDPA), IUCN-WCPA, IUCN-CCSG and others.</li> <li>Draw as appropriate on the data and findings of the Eurasian-African Bird Migration Atlas and on the initial CMS scoping work done in previous triennium on Global Migration Atlas.</li> <li>Draw as appropriate on definition of potential indicators of connectivity in the post-2020 Global Biodiversity Framework – investigate the associated datasets.</li> <li>Define the types of "relevant analyses and syntheses of information on connectivity" that would be of most value for CMS purposes.</li> <li>Evaluate the utility of discovered databases against the types of analyses and syntheses defined above.</li> <li>Evaluate the needs for "ensuring sustainability and enhanced operability and coordination" of the identified databases, and make recommendations in this regard.</li> </ul>

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Dec. 13.114	b) investigate options for creating relevant data and knowledge holding capabilities and for enhancing analysis capabilities under the auspices of the CMS, in collaboration with suitably qualified institutions and processes;	As per mandate	Options to enhance analysis capabilities investigated	<ul> <li>Define (in broad terms) the types of data/knowledge holding and analysis capabilities that are relevant for this.</li> <li>Consult on and clarify existing relevant data/knowledge holding and analysis capabilities around the CMS Family.</li> <li>Suggest options for creating or enhancing capabilities where this would add defined value to those that currently exist.</li> <li>Outline the benefits, broad scale of likely resource implications, achievability and relative priority (etc) of each of the creation/enhancement options identified.</li> </ul>
Dec. 13.114	c) investigate and report on the linkages between migratory species connectivity and ecosystem resilience;	Identify suitable partners; oversee production of the study and draw conclusions/recommendations as appropriate	Analysis conducted	<ul> <li>Prepare a rationale/scoping document that explains the origins and purpose of this question and the way in which its results will be used. Establish a clear understanding of the way in which "ecosystem resilience" is to be interpreted for the purposes of this study.</li> <li>Identify partners to contribute to the study.</li> <li>Define a set of sub-questions that will determine the component parts of the study, eg on: key elements of migratory species connectivity; key elements of ecosystem resilience and integrity; relationships between connectivity and resilience and integrity; relationships between connectivity and resilience and social learning and animal culture (resistance and recovery);trends and matters of concern; knowledge gaps and research priorities; opportunities for policy or management action; recommendations.</li> <li>Some general emphasis on enhancing appreciation for the ecological function of migration and the significance of the phenomenon in relation to other environmental issues, including climate change adaptation (partly contributing on this to Decision 13.127).</li> </ul>

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Dec. 13.114	d) having regard in particular to the Strategic Plan for Migratory Species, assess the needs and develop focused objectives for new research on key connectivity issues, including but not limited to climate change, which affect the conservation status of each of the major taxonomic groups of migratory wild animals covered by CMS in each of the world's major land and oceanic regions, and produce a report on the findings of this assessment prior to the 14th meeting of the Conference of Parties;	Identify suitable partners; oversee production of the review and draw conclusions/recommendations as appropriate	Assessment and report completed	<ul> <li>Summarise the current state of research on connectivity.</li> <li>With participatory input from relevant experts, including via an online workshop, identify (i) key connectivity issues affecting the conservation status of migratory species and needing good scientific underpinning, including but not limited to climate change and increasing incidences of climate-driven ecological catastrophes, (ii) key knowledge gaps relating to these issues, (iii) relative priorities within the list of gaps, and (iv) feasible means of undertaking research on these priorities, including concrete offers of collaboration from relevant organisations.</li> <li>Organise the work described above according to the major taxonomic groups of migratory wild animals covered by CMS in each of the world's major land and oceanic regions.</li> <li>Provide recommendations to COP.</li> </ul>
Dec. 13.114	e) consider the need for additional guidance within the framework of the CMS on assessing threats to migratory species connectivity in particular priority situations identified by the work described in sub-paragraph (d) above;	Following Dec.13.114 d), consider additional guidance	Guidance provided	<ul> <li>Assess the results of the work defined in (d) above against existing CMS guidance, and evaluate the issues (if any) on which new or revised guidance would be beneficial.</li> <li>For any potential new or revised guidance suggested by the preceding step above, produce an outline of its scope and content, and a road-map of steps for its eventual development and finalisation.</li> </ul>
Dec. 13.114	f) make recommendations as appropriate arising from the work described in this Decision;	As per mandate	Recommend ations	Distil and present recommendations arising from all the foregoing tasks above.