POSSIBLE BASIS FOR AN INITIAL SCOPING REPORT FOR A FAST-TRACK ASSESSMENT ON ECOLOGICAL CONNECTIVITY BY THE INTERGOVERNMENTAL SCIENCE-POLICY PLATFORM ON BIODIVERSITY AND ECOSYSTEM SERVICES (IPBES)

Summary:

This document contains a possible basis for an initial scoping report for a fast-track assessment on ecological connectivity to be undertaken by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES).

The document was prepared by the Secretariats of the Convention on the Conservation of Migratory Species of Wild Animals (CMS) and of the United Nations Convention to Combat Desertification (UNCCD), by the UNESCO World Heritage Centre, Secretariat to the World Heritage Convention and reviewed by the Chairs of the Scientific Council and of the CMS Working Group on Connectivity, as input to the IPBES Multidisciplinary Expert Panel and the Bureau meetings held on 27 - 29 September 2022.

This document is relevant to agenda item 13 of the 53rd Meeting of the Standing Committee.

Possible basis for initial scoping report for a fast-track assessment on ecological connectivity

This document has been prepared by the Secretariats of the Convention on the Conservation of Migratory Species of Wild Animals (CMS) and of the United Nations Convention to Combat Desertification (UNCCD), by the UNESCO World Heritage Centre, Secretariat to the World Heritage Convention and reviewed by the Chairs of the Scientific Council and of the CMS Working Group on Connectivity, as input to the work of the Multidisciplinary Expert Panel and the Bureau of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) on this important topic. The document is based on examples of IPBES initial scoping reports.

I. Introduction

Following a call for requests, inputs and suggestions regarding the second work programme of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), launched in 2019 in time for consideration by the Plenary at its seventh session (IPBES-7), proposals for an assessment on the topic of connectivity were made by the Secretariats of the Convention on the Conservation of Migratory Species of Wild Animals (CMS) and its Agreements, and of the United Nations Convention to Combat Desertification (UNCCD); the World Heritage Centre (WHC), the Governments of France and Colombia; and the Institute of Geography at the Russian Academy of Sciences. While the IPBES Multidisciplinary Expert Panel (MEP) and the Bureau considered the topic of connectivity to be of great importance and ranked it as among the top four priorities, IPBES-7 decided to proceed with an initial round of assessments covering the first three priorities and to defer consideration of an assessment on connectivity to IPBES-9.

In July 2022, IPBES-9 agreed that an initial scoping to form the basis of a fast-track assessment on ecological connectivity would be prepared by the MEP and the Bureau with input from relevant multilateral environmental agreements and other organizations, and take into account the outcomes of the resumed fifteenth meeting of the Conference of the Parties to the Convention on Biological Diversity, for consideration by the Plenary at its tenth session in 2023.

This present note sets out an initial scoping which has been developed in accordance with the draft procedures for the preparation of the Platform's deliverables (IPBES/3/3) and with the draft elements related to a thematic assessment of connectivity outlined in document IPBES/9/12, annex III.

II. Scope, rationale, utility and assumptions

A. Scope

The objective of the proposed fast-track thematic assessment of ecological connectivity is to assess the importance of connectivity and the effect of its loss on biodiversity including migratory species, ecological functioning and nature's benefit to people; the global status of trends in and drivers affecting connectivity; and the state of knowledge of approaches and tools to improve, maintain, and restore connectivity by purpose, type of intervention and ecosystem and the effectiveness of these measures. The assessment will be global in scope. Regional adaptions and applications will also be considered.

B. Rationale

The IPBES Global Assessment on Biodiversity and Ecosystem Services (2019) recognized, in the context of the assessment on the implementation of Aichi Biodiversity Targets that, while progress had been made in achieving the quantitative aspects of Target 11 on area-based conservation measures, insufficient progress had been made on numerous other key elements, including connectivity. In the last few years, the importance of connectivity has been gaining attention in many international processes (many of which are cited in Section C below), as well as efforts at the national level.

Ecological connectivity is an essential feature of nature. It is key for the survival of wild animals and plant species, for supporting migration, support genetic diversity, and underpins key ecological processes and features such as flow of energy and organisms, hydrological processes, nutrient cycling, pollination, seed dispersal and disease resistance across all biomes and spatial scales. Connectivity also plays a key role in enabling species and ecosystems to respond to environmental and climate changes. Maintaining ecological connectivity protects the entire socio-ecological system

Land use changes, infrastructure development and other human activities are affecting connectivity through habitat loss, degradation and fragmentation and barriers to animal and other natural functions. Loss of connectivity can happen very rapidly and can in many cases be irreversible. An assessment on connectivity would identify benefits, threats, and guide policy interventions to address harmful policies and minimize negative effects on connectivity along with positive interventions to support and restore connectivity, and identify important gaps in knowledge.

C. Utility:

The proposed assessment will provide a globally-relevant scientific foundation and policy implications that would benefit both policy-makers and the scientific community by:

- helping define relevant priorities for addressing numerous elements of the post-2020 Global Biodiversity Framework namely Goal A (Ecosystems, species and genetic diversity) and Targets 1 (land and sea-use planning), 2 (ecosystem restoration), 3 (protect and conserve land and sea) and 12 (increase access to green and blue spaces). The proposed assessment will be critical in assisting governments around the world understand where and how they could most effectively meet obligations arising from the new post-2020 Global Biodiversity Framework;

- advancing international and transboundary cooperation for the conservation of biodiversity as called for by the United Nations General Assembly Resolution 75/271 *Nature knows no borders: transboundary cooperation - a key factor for biodiversity conservation, restoration and sustainable use*;

- supporting sustainable infrastructure development that minimizes ecosystem fragmentation in line with provisions of UNEA 5.2. Resolution 9 *Sustainable and Resilient Infrastructure*;

- guiding restoration interventions in the context of the UN Decade on Ecosystem Restoration for 2021-2030, and in line with the UNCCD COP15 "Land, Life and Legacy" Declaration and recommendations of the Second Edition of the Global Land Outlook (2022);

- helping policy makers, land use planners and land managers navigate environmental and socioeconomic trade-offs associated with competing demands being placed on land resources in line with the Sustainable Development Goals;

- assisting countries in identifying relevant projects under the eight replenishment of the Global Environment Facility (GEF-8) which gives strong emphasis area-based conservation measures integrated into the wider landscapes and seascapes that also aim at restoring, maintaining and improving ecological connectivity.

B. Assumptions:

The proposed assessment will include a review of academic literature and of relevant reports and documents prepared by existing initiatives and public and private entities and will give recognition to traditional and local knowledge alongside other knowledge systems. It will draw on the work of existing institutions such as the IUCN World Commission on Protected Areas and its Specialist group on Connectivity Conservation, and the UNEP World Conservation Monitoring Centre and build on the findings of relevant previous and ongoing IPBES assessments, especially the first global assessment on biodiversity and ecosystems services.

III. Chapter outline

It is envisioned that the results of the fast-track thematic assessment will be presented in a four-chapter report, as set out below:

Chapter 1 will include a brief review of the many facets of connectivity and interacting considerations and their role in supporting biodiversity maintenance, particularly that of migratory species, ecological functioning and human development. It will assess the connectedness of ecological processes across multiple scales including processes related to highly dispersive species, highly interactive species, disturbance regimes and hydro-ecological flows, including processes that ensure the integrity and resilience of socio-ecological systems, supporting both natural habitat and human wellbeing.

Chapter 2 will assess the status of and trends in habitat loss, degradation and fragmentation affecting connectivity and the drivers of change of connectivity, including policies in areas such as land/sea-use changes, infrastructure development and spatial planning. As feasible it will also include consideration of relevant implications of climate change and the need to identify areas that will become important in future under various climate models, and the intersection of human and ecological connectivity. An evaluation of the current sufficiency and coherence of ecological networks, identifying best practice examples and highlighting case studies in order to share experiences will also be canvassed.

Chapter 3 will present a compilation of approaches, guidelines and tools (including case studies, best practices, procedures, lessons learned and recommendations) and assess the effectiveness of the conservation and management of area-based conservation measures including ecological networks, including requirements relevant to ecological connectivity of international site designations, for example under the Convention on Wetlands of International Importance, especially as Waterfowl Habitat and the Convention for the Protection of the World Cultural and Natural Heritage, with a view to providing the scientific basis for large-scale connectivity conservation initiatives through the biodiversity-related conventions. It will also identify opportunities to improve connectivity through positive interventions and by addressing obstacles to connectivity including infrastructure development and inconsistencies in management across and beyond national jurisdictions;

Chapter 4 will review the scope for existing major databases to support relevant analyses and syntheses of information on connectivity and identifying options for ensuring sustainability and enhanced operability and coordination of such databases; evaluate options for creating relevant data- and knowledge-holding capabilities and for enhancing analysis capabilities; and assess the needs and developing focused objectives for new research on key connectivity issues.

IV. Process and timetable

The proposed process for undertaking the fast-track thematic assessment over a two-year period and the timetable for carrying it out are outlined in the following tables.[1]

In case IPBES-10 were to take place in spring 2023, the timeframe would be as follows:

Time frame		Actions
2023	First quarter	The Plenary, at its tenth session, reviews and approves the initial scoping exercise prepared by the Multidisciplinary Expert Panel and Bureau (exact dates tbd e.g. end of March)
	First quarter	The Panel issues a call, through the secretariat, to Governments and other stakeholders for the nomination of experts (report co-chairs, coordinating lead authors, lead authors and review editors) to conduct the assessment, based on the results of the scoping exercise approved by the Plenary.
	First quarter	The Panel, via e-mail and teleconferences, selects the co-chairs, coordinating lead authors, lead authors and review editors using the approved selection criteria (see IPBES/3/3)
	Second/third quarters	The report co-chairs, coordinating lead authors and lead authors prepare an initial draft report and summary for policymakers. The authors meet early in the year to further develop the annotated outline and the sections and chapters that have been assigned to them, and again to finalize the report and prepare the summary for policymakers
	Third/fourth quarters	The draft report and the summary for policymakers are reviewed by experts, and Governments and other stakeholders.
	Fourth quarter	The report co-chairs, coordinating lead authors and lead authors revise the first draft report and summary for policymakers under the guidance of review editors and the Panel. The authors and review editors, with a small number of Panel members, meet once to prepare the final draft report and summary for policymakers
2024-2025	Fourth quarter First quarter	The summary for policymakers is translated into all the official languages of the United Nations
2024	First quarter	The final draft report and summary for policymakers are sent to Governments and other stakeholders for final review
	First quarter	Governments send written comments on the summary for policymakers to the secretariat
	First/second quarters	The Plenary, at its twelfth session, reviews and accepts the report and approves the summary for policymakers

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[1] This is based on the assusmption that the initiation of the assessment can go ahead without the detailed scoping study as per Decision IPBES/3/3.

In case IPBES-10 were to take place in autumn 2023, the timeframe would be as follows:

Time frame		*Actions*
2023	Fourth quarter	The Plenary, at its tenth session, reviews and approves the initial scoping exercise prepared by the Multidisciplinary Expert Panel and Bureau (exact dates tbd e.g. beginning of October)
	Fourth quarter	The Panel issues a call, through the secretariat, to Governments and other stakeholders for the nomination of experts (report co-chairs, coordinating lead authors, lead authors and review editors) to conduct the assessment, based on the results of the scoping exercise approved by the Plenary.
	Fourth quarter	The Panel, via e-mail and teleconferences, selects the co-chairs, coordinating lead authors, lead authors and review editors using the approved selection criteria (see IPBES/3/3)
2024	First/second quarters	The report co-chairs, coordinating lead authors and lead authors prepare an initial draft report and summary for policymakers. The authors meet early in the year to further develop the annotated outline and the sections and chapters that have been assigned to them, and again to finalize the report and prepare the summary for policymakers
	Second/third quarters	The draft report and the summary for policymakers are reviewed by experts, and Governments and other stakeholders, including during the Plenary, at it eleventh session.
	Third quarter	The report co-chairs, coordinating lead authors and lead authors revise the first draft report and summary for policymakers under the guidance of review editors and the Panel. The authors and review editors, with a small number of Panel members, meet once to prepare the final draft report and summary for policymakers
	Third/fourth quarters	The summary for policymakers is translated into all the official languages of the United Nations
	Fourth quarter	The final draft report and summary for policymakers are sent to Governments and other stakeholders for final review
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2025	Firth quarter	The Plenary, at its twelfth session, reviews and accepts the report and approves the summary for policymakers