



Convention on Biological Diversity

Distr.: General
9 June 2026

English only

Subsidiary Body on Scientific, Technical and Technological Advice Twenty-eighth meeting

Nairobi, 27 July–1 August 2026

Item 7 of the provisional agenda*

**Scientific and technical needs to support the implementation
of the Kunming-Montreal Global Biodiversity Framework:
strategic review of and update to the programme of work on
protected areas**

Submission from Brazil regarding the strategic review of and update to the programme of work on protected areas**

Note by the Secretariat

1. On 3 June 2026, the Secretariat of the Convention on Biological Diversity received a submission from the Government of Brazil, under item 7 of the provisional agenda of the twenty-eighth meeting of the Subsidiary Body on Scientific, Technical and Technological Advice, containing a proposal to incorporate a fifth component on ecological connectivity into the programme of work on protected areas under the Convention on Biological Diversity
2. The proposal from Brazil is reproduced in the annex to the present note in the form and language in which it was received by the Secretariat.

* [CBD/SBSTTA/28/1](#).

** The present document is being issued without formal editing.

Annex

Ecological Connectivity as a new Programme Element for PoWPA

Introduction

In 2025, the Convention on Biological Diversity (CBD) invited submission of views and information relating to the strategic review and analysis of the current Programme of work on protected areas (PowPA) in the context of the Kunming-Montreal Global Biodiversity Framework (KMGBF). Toward improving the PowPA and better supporting national implementation of the KMGBF, increasing implementation and emphasis on ecological connectivity is a key unifying axis for achieving multiple environmental, social, and economic priorities across multilateral environmental agreements and decision-making fora. This importance was emphasized during the 15th Conference of the Parties to the Convention on Migratory Species (CMS/CoP-15), which was convened under the theme “Connecting Nature to Sustain Life” where the High-level Segment adopted the Pantanal Declaration “Promoting Connectivity to Protect Migratory Wildlife”. The meeting advanced an agenda on ecological connectivity, recognizing it as essential for sustaining migratory wildlife, maintaining habitats and migration routes across borders, and supporting initiatives to increase coordinated conservation efforts. Additionally, commitments and actions for ecological connectivity are increasingly being aligned across other international processes, including the UN Convention to Combat Desertification, the Ramsar Convention on Wetlands, the Agreement on the Conservation and Sustainable Use of Marine Biological Diversity of Areas Beyond National Jurisdiction, the UNESCO World Congress on Biosphere Reserves, and the International Union for the Conservation of Nature (IUCN).

Ecological connectivity is fundamental to the achievement of the objectives of the CBD, as it enables the movement of species, the flow of genes and ecological processes, and the maintenance of ecosystem integrity across terrestrial, aerial, inland water, coastal and marine systems.

Importantly, climate change is becoming an increasingly significant driver of biodiversity loss and a growing threat to species survival. Species’ capacity to adapt to climate change, however, depends in part on the availability of functional landscape and waterscape connectivity. Yet, in many regions of the world, landscapes and waterscapes are highly fragmented, leaving protected areas evermore isolated and exposed to genetic erosion and species loss. Maintaining and restoring connectivity is therefore already an essential strategy for biodiversity conservation, and will become even more critical in the near future.

In an increasingly fragmented world, where infrastructure development and land- and sea-use change continue to intensify, protected and conserved areas (PCAs) that function in isolation are insufficient to halt and reverse biodiversity loss. According to one estimate in the latest *Protected Planet Report* by the UNEP World Conservation Monitoring Centre (WCMC) and IUCN, much greater progress is still needed to achieve the “well-connected” element of Target 3 of the KMGBF, as only approximately 8.5 percent of the world’s terrestrial surface is currently both protected and connected.

The KMGBF not only elevates ecological connectivity as a core requirement in Target 3 for establishing ecologically representative, well-connected, and effectively managed systems of PCAs, but is also critical for achieving the 2050 Goal A and 2030 Targets for integrated spatial planning (Target 1), ecosystem restoration (Target 2), halting species extinction (Target 4), urban planning (Target 12), and integrating biodiversity in decision-making (Target 14).

Ecological connectivity is therefore a determining condition for achieving both the 2030 Targets and the 2050 Vision for Biodiversity. Furthermore, as of January 2026, analysis of CBD National Biodiversity Strategies and Action Plans (NBSAPs) by the Center for Large Landscape Conservation and IUCN World Commission on Protected Areas Connectivity Conservation Specialist Group reveals that there are at least 45 Parties that have submitted plans containing the terms “ecological connectivity”, “ecological corridors”, or “ecological networks” and/or specific objectives for maintaining, enhancing, and restoring connectivity including through mitigation of the impacts of linear transport infrastructure [See <https://conservationcorridor.org/wp-content/uploads/Connectivity-in-Updated-NBSAPs.pdf>].

Under the Convention on the Conservation of Migratory Species of Wild Animals (CMS), ecological connectivity has been consolidated as a central pillar for the conservation of migratory species, as reflected in resolutions and decisions adopted by its Conference of the Parties. These include the adoption of an agreed definition, the Samarkand Strategic Plan for Migratory Species, the Campo Grande resolution on Ecological Connectivity – urging Parties to identify and strengthen ecological networks and corridors –, and the Global Partnership on Ecological Connectivity, a collaborative platform to support implementation, knowledge exchange and coordinated action among Parties and partner organizations, which has been endorsed by the EU “as a vital platform for collective action and urge continued resource mobilization to address implementation gaps”. These developments underscore the need for more coherent and coordinated action across conventions and recognition that ecological connectivity is essential for maintaining functional migratory corridors and flyways, reducing habitat fragmentation, and enhancing ecosystem resilience under climate change.

The International Union for Conservation of Nature (IUCN) has also advanced collective understanding of ecological connectivity along with more concrete policy and implementation. This includes the publication of “Guidelines for conserving connectivity through ecological networks and corridors” and adoption of Resolution WCC-2025-Res-126 “Recognising and reporting ecological corridors” that inter alia “CALLS ON the Director General, the Secretariat, Commissions, and Members to a. recognise the value of, and advocate for, a multilaterally agreed definition and frameworks for ecological corridors as a spatially explicit conservation measure [...]”.

While the existing PowPA can be updated to more comprehensively address ecological connectivity across its four programme elements – and had already highlighted the importance of promoting regional cooperation under the CMS to link protected area networks across borders, including through migratory corridors for key species (Goal 1.3, supporting activity 1.3.7), the scale, complexity, and cross-cutting nature of its importance warrants a dedicated programme element. This new Programme Element 5 will provide an integrated framework to plan, cooperate, govern, enable, monitor, and strengthen ecological connectivity, while formalizing synergies especially between CBD and CMS, but also other multilateral environmental agreements (MEAs)

and decision-making fora to enhance more comprehensive implementation at national, regional, and transboundary levels.

Crucially, a connectivity focused element would also provide a clear platform for enhanced synergies with the CMS, potentially inspired by the CBD-Ramsar Convention partnership to promote the implementation of the Inland Waters Biodiversity Programme of Work, recognizing that migratory species conservation depends fundamentally on the existence of connected habitats across national borders and governance regimes. The CMS, through its scientific expertise, instruments and multilateral partnerships, stands out as a natural strategic partner for such an element, contributing to joint approaches that respect mandates while maximizing collective impact. Brazil emphasizes that this discussion should be understood as progressive, consensual and forward-looking. The current strategic review of and update to the programme of work on protected areas offers an appropriate space to recognize ecological connectivity as a converging priority and to acknowledge the complementarity between the CBD and CMS.

For the purposes of this new Programme Element 5, ecological connectivity is understood in a manner consistent with the CMS, which defines ecological connectivity as “[...] the unimpeded movement of species, connection of habitats without hindrance and the flow of natural processes that sustain life on Earth” (CMS Resolution 14.16). Also, it considers that ecological connectivity encompasses both structural and functional dimensions, including the spatial configuration of ecological networks and corridors and their effectiveness in enabling species movement and ecological processes. This shared understanding reinforces coherence between CBD, CMS, and other MEAs and decision-making fora while supporting coordinated action across ecosystems and governance levels.

The new Programme Element 5 “Ecological Connectivity” is therefore proposed for consideration as follows:

Goal 5.1 – To integrate ecological connectivity into land and seascapes spatial planning processes including the planning and design of protected and conserved area (PCA) systems

Target. By 2030, Parties have integrated ecological connectivity objectives into the designation and expansion of PAs and OECMs, and in turn, networks of PAs and OECMs are integrated into national and subnational spatial planning policies, legislation, regulations, and programs across terrestrial, inland water, coastal and marine environments.

Suggested activities of the Parties

5.1.1 By 2027, Identify and map corridors, stepping-stones and other critical areas for ecological connectivity, using best available science, and Indigenous and local knowledge, and apply this knowledge to relevant national and subnational policies for the designation and expansion of PAs and OECMs, paying particular attention to those priority corridors that are not yet part of the PA and OECM network.

5.1.2 By 2027, identify priority areas and carry out measures to maintain, enhance or restore ecological connectivity to ensure an effective and well-connected PA and OECM network by taking into account key gaps in areas important for connectivity outwith the existing PA network, connectivity gaps between existing PAs and OECMs, threatened species, and the conservation

needs of migratory species, among other considerations aligned with national priorities for biodiversity conservation.

5.1.3 Scale up ecological connectivity measures in currently under-represented ecosystems across the PA network, which include, marine and island ecosystems in national seas, exclusive marine economic zones and areas beyond national jurisdiction; rivers; wetlands; estuaries; and coastal zones and seek out opportunities to align ecological corridors for terrestrial connectivity with riverine and inland water networks where feasible.

5.1.4 Draft and adopt legislation that recognizes ecological networks, corridors, stepping-stones and other critical areas for enhancing ecological connectivity and require them to be managed in ways that support their ability to allow for the movement of wildlife and ecological processes across the PA and OECM networks and beyond.

5.1.5 Support the integration of regional, national and sub-national networks of protected areas and OECMs into broader land- and seascape spatial planning processes, inter alia by establishing and managing ecological connectivity networks, ecological corridors and/or buffer zones, where appropriate, to maintain ecological processes and taking into account the needs of migratory species.

Suggested supporting activities of the Executive Secretary

5.1.6 Compile, analyze, and make available case studies, spatial tools and best practices on integrating ecological connectivity into terrestrial, aerial, freshwater, coastal and marine spatial planning processes.

5.1.7 Facilitate technical exchange and cooperation among Parties, international organizations, other conventions, and relevant partners to support the integration of ecological connectivity into PCA systems and for larger ecological networks for conservation, including under climate-change scenarios.

5.1.8 Liaise with long distance trail managers to align their routes and management with ecological connectivity strategies and goals.

Goal 5.2 – To create enabling conditions for the inclusive, equitable, and effective governance and management PAs and OECMs networks.

Target. By 2030, Parties have established or strengthened enable inclusive, equitable, and effective governance arrangements for ecological networks and corridors and have created policy, institutional, technical, and financial enabling conditions to scale up effective action for enhancing ecological connectivity across the PA network.

Suggested activities of the Parties

5.2.1 Consistent with national legislation and applicable international obligations promote governance models that recognize the rights and roles of Indigenous Peoples and local communities, as well as the nature recreation community, consistent with national legislation and applicable international obligations.

5.2.2 Assess and, where appropriate and feasible, address social, cultural, recreational, and economic positive and negative impacts associated with ecological connectivity measures and promote collaborative landscape- and seascape-scale governance mechanisms linking protected and conserved areas with surrounding uses.

5.2.3 By 2028, integrate well-connected Protected Area (PA) and Other Effective Area- Based Conservation Measure (OECM) objectives into National Biodiversity Strategies and Action Plans (NBSAPs) and relevant sectoral policies through spatially explicit and measurable commitments at national, subnational, and territorial levels, while harmonizing sectoral policies to avoid, minimize, and mitigate impacts on ecological connectivity across landscapes and seascapes.

5.2.4 Ensure that PA and OECM capacity building measures include components related to the planning, management and restoration of ecological connectivity, and that sustainable financing for protected areas and national biodiversity finance plans include financial mechanisms to support the maintenance, enhancement and restoration of ecological connectivity across the PA and OECM network.

5.2.5 Co-develop with financial institutions and the private sector, investment frameworks, incentives, and biodiversity risk assessments that consider ecological connectivity and establish public-private partnerships to mobilize finance, integrate connectivity considerations into investment decisions, and to pilot and scale ecological connectivity initiatives and projects to ensure an effective and well-connected PA and OECM network.

Suggested supporting activities of the Executive Secretary

5.2.6 Develop guidance and principles of good practice on inclusive and equitable governance models for ecological networks and corridors, including for migratory routes and flyways, with particular attention to the recognition of the rights, roles and governance systems of Indigenous Peoples and local communities, as well as the nature recreation community, and share best practices for ecological connectivity.

5.2.7 Facilitate dialogue processes among Parties, Indigenous Peoples, local communities, civil society organizations, and relevant sectors to exchange experiences and lessons learned for the governance of ecological connectivity at landscape- and seascape-scales.

5.2.8 Facilitate capacity-building activities, including workshops, learning modules, and cooperation on planning, management, and financing related to ecological connectivity.

5.2.9 Provide technical support to Parties for the integration of ecological connectivity objectives into national biodiversity strategies and action plans (NBSAPs), sectoral policies, and implementation of the Kunming–Montreal Global Biodiversity Framework, including through practical guidance and examples of successful models.

5.2.10 Facilitate multi-stakeholder dialogues and platforms for private sector engagement and coordinate with international finance and conservation bodies to mobilize resources and share best practices for ecological connectivity.

5.2.11 Support the mobilization and alignment of financial resources for ecological connectivity, in cooperation with the financial mechanisms of the Convention and relevant partner institutions.

Goal 5.3 – To strengthen transboundary, cross-sectoral and international cooperation to share knowledge and promote coherent action for scaling up ecological connectivity across national systems of protected areas and OECMs.

Target. By 2030, Parties have strengthened transboundary, cross-sectoral and international cooperation and collaboration including between the Convention on Biological Diversity (CBD), the Convention on the Conservation of Migratory Species of Wild Animals (CMS), and other Multilateral Environmental Agreements and decision-making fora, and there is coherent and coordinated ecological connectivity action occurring within and across countries, through its integration into sectoral policies and the harmonization of MEAs.

Suggested activities of the Parties

5.3.1 By 2028, identify priority transboundary ecological networks and corridors and strengthen regional agreements and cooperation frameworks to manage shared ecosystems and transboundary PAs for connectivity.

5.3.2 Recognize, promote and integrate ecological connectivity and well-connected PA and OECM networks as ecosystem-based and climate-smart approaches that support land- and seascape spatial planning, climate mitigation and adaptation, sustainable development goals and other sectors' goals beyond biodiversity.

5.3.3 Promote and support harmonized approaches, in line with CBD and KMGBF objectives, across the MEAs for addressing ecological connectivity and its threats.

Suggested supporting activities of the Executive Secretary

5.3.4 Provide technical support to Parties for the development of regional agreements and cooperation frameworks and the integration of ecological connectivity objectives into other sectors.

5.3.5 Formalize collaboration between the CBD and the CMS, the primary MEA on issues related to ecological connectivity, and decision-making fora, such as IUCN, as far as possible, through joint work programmes, coordinated scientific guidance, information exchange, and interoperable reporting approaches.

5.3.6 Promote platforms and initiatives focusing on ecological connectivity, such as the Global Partnership on Ecological Connectivity, as critical sources to share knowledge and best practices on ecological connectivity and in supporting coherent and coordinated global action.

5.3.7 Encourage alignment with relevant global and regional frameworks addressing ecological connectivity.

Goal 5.4 – Develop standards, monitoring, and evaluation frameworks for ecological connectivity

Target. By 2030, Parties have developed and initiated the application of standards, indicators, and monitoring frameworks to assess ecological connectivity and its contribution to conservation effectiveness.

Suggested activities of the Parties

5.4.1 Apply science-based standards and best practice guidance for ensuring suitable timebound and measurable national and regional level connectivity indicators, including both structural and functional ecological connectivity, are established and monitored.

5.4.2 Integrate ecological connectivity indicators into national reporting and PA and OECM management effectiveness evaluations.

5.4.3 Compile and disseminate best practices and lessons learned about ecological connectivity, including transboundary and migratory connectivity approaches, through the clearing-house mechanism and related knowledge platforms.

5.4.4 Support the development of standardized metrics and reporting frameworks for infrastructure, agriculture, energy, and urban development projects or any other activities that may fragment the PA and OECM network, and incorporate them into environmental, social, and governance (ESG) frameworks and relevant risk assessments.

Suggested supporting activities of the Executive Secretary

5.4.5 Coordinate the development, in collaboration with scientific bodies, Parties and relevant partners, of voluntary technical guidance and standards for the assessment of ecological connectivity.

5.4.6 Facilitate exchange among scientific and technical initiatives to promote harmonization of indicators for assessing structural and functional ecological connectivity across ecosystems.

5.4.7 Support the integration of ecological connectivity indicators into national reporting under the Convention and into evaluations of protected and conserved area management effectiveness.
