THE CONVENTION ON WETLANDS 64th meeting of the Standing Committee Gland, Switzerland, 20-24 January 2025

SC64 Doc.29.4 Rev.2

Proposed draft resolution on promoting incorporation of <u>frontiernew</u> technology and traditional-<u>ecological</u> knowledge in wetland conservation, restoration, management, and wise use

Submitted by China, Burkina Faso, <u>Cambodia,</u> Gabon<u>, Libya</u>, Madagascar, and Panama

Action requested:

The Standing Committee is invited to review and approve the attached draft resolution for consideration by the 15th meeting of the Conference of the Contracting Parties.

Secretariat cover note

The draft resolution is to call on incorporation and integration of frontier technology and TEK in wetland conservation, restoration, management, and wise and sustainable use.

Paragraph 19 requests the Secretariat to report on the status on technology and knowledge sharing under Resolution VII.19 to the 67th meeting of the Standing Committee. It is not clear what guidance in Resolution VII.19 is to be applied in the preparation of a report on technology and knowledge sharing. The Secretariat suggests including specific language as to the nature, content, format, etc. of the report in the draft resolution to determine what resources would be needed to implement this action.

The Secretariat has invited the STRP to review the draft resolution.

Introduction

Frontier or newNew technologies and traditional knowledge are important working areas and initiatives to address global challenges in environment and sustainable development. Technology and knowledge are important working areas in UN programmes and agencies and MEAs, including UNEP, UNESCO, UNFCCC and CBD, particularly implementation of the Kunming-Montreal Global Biodiversity Framework. Both *frontiernew* technology and traditional *ecological*-knowledge *(TEK)* are contributing to wetland conservation, restoration, management and wise use. Scientific knowledge and indigenous and local knowledge are integral parts of knowledge systems. Modern science-based technology and traditional knowledge are inseparable in long-term human development and both vital to build a harmonious relationship with nature. Resolution VII.19 on Guidelines for international cooperation under the Convention on Wetlands indicates that the Convention will increase its efforts to share knowledge (traditional, indigenous, and more recently derived technologies and methods) among Contracting Parties. Traditional knowledge and technology are targets of the Fifth Strategic Plan of the Convention. The draft resolution is to call on incorporation and integration of frontier technology and *TEK* traditional knowledge in wetland conservation, restoration, management, and wise and sustainable use.

Paragraph (number and key part of text)	Action	Cost (CHF)
Paragraph 18	Request STRP to develop a technical report and recommendations to COP17	25,000
Paragraph 19	Request the Secretariat to report status to SC	3,000

Financial implications of implementation

Draft Resolution XV.xx on Promoting incorporation of <u>frontiernew</u> technology and traditional ecological knowledge in wetland conservation, restoration, management, and wise use

- AWARE that science and, technology and innovation are means to implement and revitalize the Global Partnership for Sustainable Development under Goal 17 of the United Nations 2030 Sustainable Development Goals (SDGs); and that the Technology Facilitation Mechanism was established and aimed at supporting the SDGs¹;
- 2. NOTING that frontier or new technologies and traditional knowledge and practice are important working areas and initiatives to address global challenges in environment and sustainable development in multiple UN programmes and specialized agencies, including the UN Secretary-General's Strategy on New Technologies, the UN Environment Programme's Digital Transformations and the Coalition for Digital Environmental Sustainability (CODES), and the Science, Technology and Innovation (STI) system and Local and Indigenous Knowledge Systems (LINKS) of the UN Educational, Scientific and Cultural Organization (UNESCO);
- 3. ALSO NOTING that technology and knowledge are important in multiple environmental agreements (MEAs); that the UN Framework Convention on Climate Change (UNFCCC) established its Technology Mechanism in 2010; and that the Parties to the Convention on Biological Diversity (CBD) confirmed in Section C of the Decision 15/4 that implementation of the Kunming-Montreal Global Biodiversity Framework (KM-GBF) should be based on scientific evidence and traditional knowledge and practices, recognizing the role of science, technology and innovation²;
- 4. ACKNOWLEDGING that advances and practices of <u>frontiernew</u> technology are contributing to wetland conservation, restoration, management and wise use, <u>such as machine learning and</u>-artificial intelligence, space-air-ground integrated networks (SAGIN), smart sensors, the internet of things, clouds and data processing engines, biotechnology, nanotech, robotics, etc., which-provide <u>providing</u> significant support to wetland inventory and monitoring, ecological character assessment, <u>prediction of trends of changestrend analyses and predictions</u>, regulation of hydrological and ecological processes, etc., with precise, highly frequent, and intelligent data-and analysis;
- 5. ALSO ACKNOWLEDGING that traditional knowledge, <u>especially traditional ecological knowledge</u> (TEK³), has an irreplaceable value and role in wetland conservation, restoration, management, and wise and sustainable use; and NOTING that <u>manynumbers of</u> Wetlands of International Importance are also nominated as World Natural and Cultural Heritage Properties or Cultural Heritage Landscapes, or Biosphere Reserves, for example for their traditional wetland agriculture;
- 6. AWARE that scientific knowledge and indigenous and local knowledge are integral parts of knowledge systems (IPBES, 2022)⁴; and REALIZING that modern science-based technology and traditional knowledge are inseparable in long-term human development and both vital to build a harmonious relationship with nature;

¹ Paragraph 70, the 2030 Agenda for Sustainable Development.

² CBD/COP/DEC/15/4 Section C. Paragraph 7(I).

³-Traditional Ecological Knowledge (TEK) is a cumulative body of knowledge and beliefs, handed down through generations by cultural transmission, about the relationship of living beings (including humans) with one another and with their – environment. IPBES. https://www.ipbes.net/node/42038

⁴ IPBES (2022). Summary for Policymakers of the Methodological Assessment Report on the Diverse Values and Valuation of Nature of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. Pascual, U, et al. IPBES secretariat, Bonn, Germany. https://doi.org/10.5281/zenodo.6522392

- 7. RECALLING that the Guidelines related to Guiding Principles for the sharingconsideration of traditional knowledge in wetlands management, developed based on shared expertise and information among Contracting Parties in Resolution VII.19⁵ indicate that the Convention will increase its efforts to share knowledge (traditional, indigenous, preserve, promote and more-recently derived technologies incorporate traditional knowledge, innovations and methods)-among Contracting Parties; practices among Contracting Parties, complying with the international principle that guarantees that the rights of Indigenous Peoples (Free, Prior and Informed Consent) and the Indigenous and Tribal Peoples Convention 1989 (No. 169);
- 8. ACKNOWLEDGING that the Scientific and Technical Review Panel has developed <u>many of</u> the technology and knowledge<u>related</u> publications for the Convention since 2006;
- 9. WELCOMING the fact that Standing Committee Decision SC63-26 decided the theme of World Wetland Day 2026 as "Wetlands and traditional knowledge: Celebrating cultural heritage";
- NOTING that traditional knowledge and technology are <u>indicatedaddressed</u> in Target 1.x, 2.x, 3.x and 4.x (to be updated with the final SP5) in the Fifth Strategic Plan of the Convention (Resolution XV.xx Annex 2); and
- REALIZING the significance of the incorporation and integration of <u>frontiernew</u> technology and <u>TEK traditional knowledge</u> in wetland conservation, restoration, management, and wise and sustainable use, and the weakness of separate applications of frontier technology and TEK;

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- 12. AFFIRMS that Contracting Parties have different <u>approaches and practices of frontierin</u> promoting new technology and <u>preserving</u> traditional <u>ecological</u> knowledge (TEK) at national and local levels depending on their national situation, culture, and available resources;
- 13. URGES Contracting Parties, respecting free, prior and informed consent of indigenous peoples and local communities, to promote the development of wetland-science-and, technology-andpreserve wetland TEK;, and innovation in benefit of wetland conservation, ,as well as of the welfare of wetland-based local communities;;
- 14. ENCOURAGES Contracting Parties to __share technology and knowledge <u>relevant to wetland</u> <u>conservation and management, [on voluntary and mutually agreed terms] as appropriate, for</u> promotion of integrative development of <u>frontiernew</u> technologies and <u>TEKtraditional</u> <u>knowledge</u> at regional and global levels <u>thoughthrough</u> multiple mechanisms, including Ramsar Regional Initiatives, <u>thematic fora for addressing cross cutting issues such as the World Coastal</u> <u>Forum, other MEA programmes and IOP-led initiatives;</u>
- 15. FURTHER ENCOURAGES Contracting Parties, respecting free, prior and informed consent of indigenous peoples and local communities, to promote the incorporation and integration of frontiernew technology and TEK traditional knowledge, [on voluntary basis and mutually agreed terms] as appropriate, in wetland conservation, restoration, management, and wise use, based on _ while respecting their national feasibilitycircumstances and within available resources, and to share economic or other benefits from work undertaken on wetlands with the holders of traditional knowledges;

⁵ Annex Section D Paragraph D1.

- 16. INVITES those Contracting Parties developing frontier technologies, such as satellites, artificialintelligence, open access databases, clouds and data process engines, etc. to build publicservices and access to the Convention on voluntary bases;
- <u>15bis ENCOURAGES efforts to respect ownership of knowledge and maintain consistency with</u> <u>existing international agreements on intellectual property and principles of Free, Prior and</u> <u>Informed Consent (FPIC) regarding access to technology and knowledge and that should include</u> protections around its dissemination according to the wishes of the participants.
- 17. INVITES those Contracting Parties incorporating and integrating <u>frontiernew</u> technology and <u>TEKtraditional knowledge</u> to share their <u>good</u> practices, experiences and lessons; in wetland <u>conservation</u>, management, and wise use [on voluntary bases];
- 18. REQUESTS the Scientific and Technical Review Panel-to-, subject to available resources and capacity, to

<u>a.</u> review the advances <u>and practices</u> in wetland <u>frontiernew</u> technology and their application₇ <u>and</u> the preservation status of wetland <u>TEK, best practices oftraditional knowledge;</u> <u>b. develop guidance on</u> incorporation and integration of <u>frontiernew</u> technology and <u>TEKtraditional knowledge</u> into wetland conservation, restoration, management, and wise and sustainable use; and to develop guidelines for presentation in priority areas of new technology <u>and traditional knowledge;</u>

<u>c. report</u> to the Contracting Parties at the 17th meeting of the Conference of the Contracting Parties (COP17), <u>withon refined</u> areas of <u>frontiernew</u> technology and <u>TEK possibly covering but</u>not limited traditional knowledge to:

- Wetland inventory, (including tangible and living heritage), mapping and monitoring;
- Carbon calculation and estimation;
- Evaluation of trends of ecological character changes;
- Regulation of hydrological and ecological processes;
- Ecosystem services valuation and trade-off;
- Wise and sustainable use of wetland resources;
- Threat treatment and management <u>including restoration of and support for management</u> of sacred sites;
- ManagementParticipatory management and decision making; including for indigenous territories;;
- Risks and control of new technologies;

- Public access to technical and scientific information on wetlands stored in platforms created by the contracting parties;
- Systematic assessment of the ecological integrity of wetlands;

18bis REQUESTS that in tandem with this review, the STRP apply, as appropriate, the approach torecognising and working with Indigenous and local knowledge in the IntergovernmentalScience-Policy Platform on Biodiversity and Ecosystem Services, to ensure ethical engagementprotocols are followed when using traditional knowledge;

- 19. REQUESTS the Secretariat to report on the status on technology and knowledge sharing under assist STRP to work on the review assignment described in paragraph 18a of this Resolution VII.19 to the 67th meeting of the Standing Committee (SC67);; and
- 20. CALLS ON the International Organization Partners of the Convention, other NGOs, research institutes institutions, and private sector bodies to contribute to the development and

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application of wetland <u>frontiernew</u> technology <u>incorporating with TEK. and its use for the</u> <u>preservation</u>, <u>promotion and incorporation of traditional knowledge</u>.