

Report of the European Expert Meeting in Preparation of SBSTTA-22

June 5 - 8, 2018

**Convened by the
German Federal Agency for Nature Conservation
at the International Academy for Nature Conservation,
Isle of Vilm**

Horst Korn, Jutta Stadler, Rainer Schliep (Eds.)

- Digital Sequence Information on Genetic Resources
- Risk Assessment and Risk Management of Living Modified Organisms
- Synthetic Biology
- Updated Scientific Assessment of Progress towards Selected Aichi Biodiversity Targets and Options to Accelerate Progress
- Protected Areas and Other Measures for Enhanced Conservation and Management
- Marine and Coastal Biodiversity: Ecologically or Biologically Significant Marine Areas, Addressing Anthropogenic Underwater Noise and Marine Debris, Biodiversity in Cold-Water Areas and Marine Spatial Planning
- Biodiversity and Climate Change: Ecosystem-Based Approaches to Climate Change Adaptation and Disaster Risk Reduction
- Invasive Alien Species
- Conservation and Sustainable Use of Pollinators
- Second Work Programme of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services

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Glossary of Acronyms

ABNJ	Areas Beyond National Jurisdiction
AHTEG	Ad Hoc Technical Expert Group
AR	Assessment Report
CBD	Convention on Biological Diversity
COP	Conference of the Parties
CP	Cartagena Protocol
DSI	Digital Sequence Information
EbA	Ecosystem-based Adaptation
EBSA	Ecologically or Biologically Significant Marine Areas
Eco-DRR	Ecosystem-based Disaster Risk Reduction
ES	Executive Secretary
EU	European Union
FAO	United Nations Food and Agriculture Organization
GBO	Global Biodiversity Outlook
IAG	Informal Advisory Group
IPBES	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services
IPCC	Intergovernmental Panel on Climate Change
ISPM	International Standards for Phytosanitary Measures
IUCN	International Union for Conservation of Nature
LMO	Living Modified Organism
NBSAP	National Biodiversity Strategies and Action Plan
NGO	Non-Governmental Organization
NR	National Report
OECM	Other Effective area-based Conservation Measures
OIE	World Organization for Animal Health
RFMO	Regional Fisheries Management Organisations
RSC	Regional Seas Convention
SBI	Subsidiary Body on Implementation (CBD)
SBSTTA	Subsidiary Body on Scientific, Technical and Technological Advice (CBD)
SDG	Sustainable Development Goal
TS	Technical Series (CBD)
UN	United Nations
UNDP	United Nations Development Program
UNEA	United Nations Environment Assembly
UNEP	United Nations Environmental Program
UNFCCC	United Nations Framework Convention on Climate Change
WCMC	World Conservation Monitoring Centre (UNEP)
WCPA	World Commission on Protected Areas (IUCN)
WDPA	World Database on Protected Areas (IUCN and UNEP, managed by UNEP-WCMC)

1 Introduction

The European expert meeting in preparation of the upcoming twenty second meeting of the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA-22) of the Convention on Biological Diversity (CBD) was held as an informal scientific workshop, **aiming to exchange information and opinions on the topics to be discussed at the upcoming twenty second meeting of SBSTTA. The 70 participants from 18 countries attended in their personal capacities as biodiversity experts.** Alexander Shestakov from the CBD Secretariat took part in the meeting as observer. Further experts introducing specific topics to the meeting were Margret Engelhard (Germany), Vincent Fleming (United Kingdom), Rob Hendriks (The Netherlands), Janos Hennicke (Germany), Kathleen MacKinnon (IUCN's World Commission on Protected Areas, WCPA), Barbara Livoreil (France), Hugo René Rivera Mendoza (Austria), Hendrik Segers (Belgium), Tone Solhaug (Norway), Anne Gabrielle Wüst Saucy (Switzerland), and Karin Zaunberger (European Commission). Moustafa Fouda (Egypt) represented the Ministry of Environment from the host country for COP-14.

The participants of the preparatory meeting to SBSTTA-22 were welcomed by Horst Korn from the German Federal Agency for Nature Conservation who chaired the meeting. The topics were introduced briefly by the above named specialists in their field and discussed extensively in small working groups and in plenary. **In this report, the main points of discussion are summarized and general comments on the Secretariat's documents are given. In addition, amendments to the recommendations given in the Secretariat's documents are suggested. The aim of the expert meeting was not to reach a consensus on the individual points but rather to have an exchange of opinions and ideas. A high degree of similar points of view was apparent. This report is intended to help individuals and delegations in their preparation of the topics on the agenda of SBSTTA-22.**

How to read the report

Amendments and additions to the draft SBSTTA-22 documents are marked as follows throughout the report:

~~Text~~ = text is suggested to be deleted

Text = suggestion for new text

[(Text)] = comment on suggested change

2 Digital Sequence Information on Genetic Resources

Item 3 of the provisional agenda

Item 3 was introduced to the plenary of the Vilm meeting by Hendrik Segers who also chaired the respective working group.

The participants discussed item 3 and the results of the discussion are mirrored in the following comments, proposals for changes and additions in the document's suggested recommendations.

Introductory Remark

The participants of the Vilm meeting to the discussion on the subject of Digital Sequence Information found it difficult to develop recommendations for SBSTTA-22 in view of the lack of clarity on the subject and would therefore suggest that it may be useful to reach full understanding of the term Digital Sequence Information before further considerations beyond the following recommendations.

Document UNEP/CBD/SBSTTA/22/2:

Suggestions on the text:

DIGITAL SEQUENCE INFORMATION ON GENETIC RESOURCES

Note by the Executive Secretary

I. INTRODUCTION

abridged; continued

SUGGESTED RECOMMENDATIONS

15. The Subsidiary Body on Scientific, Technical and Technological Advice ~~may wish to take~~ note of:

(a) The compilation and synthesis of the views and information related to digital sequence information on genetic resources, submitted pursuant to decision XIII/16;¹

¹ CBD/SBSTTA/22/INF/2.

(b) The fact-finding and scoping study to clarify terminology and concepts and to assess the extent and the terms and conditions of the use of digital sequence information on genetic resources in the context of the Convention and the Nagoya Protocol, prepared pursuant to decision XIII/16;²

(c) The report of the Ad Hoc Technical Expert Group on Digital Sequence Information on Genetic Resources.³

~~16. The Subsidiary Body may also wish to consider the outcomes of the Ad Hoc Technical Expert Group and prepare recommendations on:~~

~~(a) The potential implications of the use of digital sequence information on genetic resources, for the three objectives of the Convention for the consideration of the Conference of the Parties at its fourteenth meeting;~~

~~(b) The potential implications of the use of digital sequence information on genetic resources, for the objective of the Nagoya Protocol for the consideration of the Conference of the Parties serving as the meeting of the Parties to the Nagoya Protocol at its third meeting. [(Rationale: These are not recommendations.)]~~

The Subsidiary Body on Scientific, Technical and Technological Advice recommends that the Conference of the Parties at its fourteenth meeting and the Conference of the Parties serving as the meeting of the Parties to the Nagoya Protocol at its third meeting adopt a decision along the following lines:

The Conference of the Parties and the Conference of the Parties serving as the meeting of the Parties to the Nagoya Protocol

Mindful of the three objectives of the Convention,

Recalling article 17 of the Convention and decisions VIII/11, XI/29, [(Suggestion: Insert all decisions on open access and sharing of information.)]

16. Recognizes the importance of “DSI” for the conservation and sustainable use of biodiversity while emphasizing that the three objectives of the Convention are interlinked and mutually supportive; [(Rationale: Line partially taken from the report of the AHTEG on DSI on genetic resources, paragraph 13)]

17. Invites Parties, other governments, indigenous peoples and local communities and relevant organizations and stakeholders to submit views on an operational definition of Digital Sequence Information;

18. Decides to establish an AHTEG and requests the Executive Secretary, subject to the availability of financial resources, to convene a meeting of this group in accordance with the terms of references contained in the annex;

19. Requests the SBSTTA to consider the outcomes of the AHTEG and to make a recommendation on an operational definition of Digital Sequence Information for the consideration by the Conference of the Parties at its fifteenth meeting and the Conference of the Parties serving as the meeting of the Parties to the Nagoya Protocol at its fourth meeting;

[(Some participants of the meeting suggested the following additional recommendations:

20. Calls upon Parties and other countries in the position to do so to support capacity building on the use of molecular sequence data for conservation and sustainable use of biodiversity.)]

² CBD/SBSTTA/22/INF/3.

³ CBD/SBSTTA/22/INF/4.

Annex

**PROPOSED TERMS OF REFERENCE OF THE AD HOC TECHNICAL EXPERT GROUP ON
DIGITAL SEQUENCE INFORMATION**

The Ad Hoc Technical Expert Group shall:

(a) Consider:

- i. the compilation and synthesis of the views and information related to Digital Sequence Information on genetic resources, submitted pursuant to decision XIII/16;**
- ii. the fact-finding and scoping study to clarify terminology and concepts and to assess the extent and the terms and conditions of the use of Digital Sequence Information on genetic resources in the context of the Convention and the Nagoya Protocol, prepared pursuant to decision XIII/16;**
- iii. the report of the Ad Hoc Technical Expert Group on Digital Sequence Information on Genetic Resources; and**
- iv. the views submitted.**

[(Option 1:)]

(b) Propose an operational definition of Digital Sequence Information, using the relevant information above;

[(Option 2:)]

(b) Further assess the nature of digital sequence information [including questions regarding the rights on such digital information] and the implications of the use of DSI on genetic resources;

(c) Submit the outcomes for consideration by a meeting of the SBSTTA to be held prior to Conference of the Parties at its fifteenth meeting and the Conference of the Parties serving as the meeting of the Parties to the Nagoya Protocol at its fourth meeting.

abridged

3 Risk Assessment and Risk Management of Living Modified Organisms

Item 4 of the provisional agenda

Item 4 was introduced to the plenary of the Vilm meeting by Anne Gabrielle Wüst Saucy who also chaired the respective working group.

The participants took note of the document UNEP/CBD/SBSTTA/22/3 and discussed the item. The results of the discussion are mirrored in the following changes in the document's suggested recommendations.

Document UNEP/CBD/SBSTTA/22/3:

Suggestions on the text:

RISK ASSESSMENT AND RISK MANAGEMENT OF LIVING MODIFIED ORGANISMS

Note by the Executive Secretary

INTRODUCTION

abridged; continued

III. SUGGESTED RECOMMENDATIONS

18. The Subsidiary Body on Scientific, Technical and Technological Advice may wish to recommend that the Conference of the Parties serving as the meeting of the Parties to the Cartagena Protocol on Biosafety adopt a decision along the following lines:

The Conference of the Parties serving as the meeting to the Parties to the Cartagena Protocol on Biosafety,

Recalling decisions BS-[VII/12](#) and [XII/24](#) recommending a coordinated approach on the issue of synthetic biology,

1. *Notes* the availability of numerous guidance documents **including the voluntary guidance on risk assessment of living modified organisms** and other resources to support the process of risk assessment, but *recognizes* the gaps and needs identified by some Parties; **[(Rationale: Coherence with decision CBD/CP/MOP/DEC/VIII/12)]**

2. *Recognizes* the divergence of views among Parties on whether or not additional guidance on specific topics of risk assessment is needed;

3. *Takes note* of the work of the Ad Hoc Technical Expert Group on Synthetic Biology, and in particular, *notes* that, while there can be potential benefits arising from **living modified** **[(Rationale:**

Specifying what is expected by the Cartagena Protocol)] organisms containing engineered gene drives, additional research and guidance are ~~would be~~ [needed] [useful] [(Rationale: Adapted to Cartagena Protocol objectives and tasks (Cartagena Protocol language).)] before any such organism can be considered for release into the environment, including into lands and territories of indigenous peoples and local communities; [(Rationale: This issue is tackled under the CBD.)]

4. *Calls for* broad international cooperation to assess the potential adverse effects to the conservation and sustainable use of biodiversity, taking into account human health, from **living modified [(Rationale: Language from Cartagena Protocol)] organisms produced through genome editing, organisms containing engineered gene drives and living modified fish [as a first step]; [(Rationale: To focus the work on a stepwise approach. Genome editing is too broad to expect an effective result.)]**

5. **Decides to establish a process for the identification and prioritization of specific issues of risk assessment of living modified organisms that may warrant future consideration by the Conference of the Parties serving as the meeting of the Parties to the Cartagena Protocol, taking into account the elements listed in the annex to the present draft decision; [(Rationale: Brought up from 6. to keep coherence.)]**

5.6. *Decides* to carry out a comprehensive study regarding the potential adverse effects to the conservation and sustainable use of biodiversity, taking into account human health, and including considerations that are relevant to the risk assessment of (a) **living modified organisms produced through genome editing and organisms [(Rationale: Language from Cartagena Protocol)]** containing engineered gene drives, and (b) living modified fish, in order to inform further consideration of whether there is a need for the development of additional guidance materials on risk assessment for these organisms;

6. ~~*Also decides to establish a process for the identification and prioritization of specific issues of risk assessment of living modified organisms that may warrant future consideration by the Conference of the Parties serving as the meeting of the Parties to the Cartagena Protocol, taking into account the elements listed in the annex to the present draft decision; [(Rationale: Shifted to new 5.)]*~~

7. *Further decides* to establish an ad hoc technical expert group on risk assessment, composed of experts selected in accordance with the consolidated modus operandi of Subsidiary Body on Scientific, Technical and Technological Advice,¹ to work on issues referred to in paragraphs 5 and 6 above and to prepare a report for consideration by the Subsidiary Body on Scientific, Technical and Technological Advice with a view to enabling the Subsidiary Body to prepare a recommendation for consideration by the Conference of the Parties serving as the meeting of the Parties to the Cartagena Protocol at its tenth meeting;

8. *Decides* to extend the online forum on risk assessment and risk management so that it may assist the ad hoc technical expert group on risk assessment;

9. *Requests* the Executive Secretary:

(a-a) To carry out a comprehensive study referred to in paragraph (6) above to assist the discussion of the online forum and the ad hoc technical expert group on risk assessment; [(Rationale: The ATHEG works on the outcome of the Secretariat regarding the comprehensive study in cooperation with the online forum. Sequence of work: (1) Secretariat commissions a comprehensive study for (2) online forum review and supplement. (3) Online forum discusses and amends the criteria. (4) The AHTEG organizes the testing on the basis of the examples and amends the criteria if necessary.)]

(a) To collect and synthesize relevant information to facilitate the work of the online forum and the ad hoc technical expert group;

(b) To assist the lead moderator of the online forum in convening discussions and reporting on the results of the discussions;

¹ [Decision VIII/10](#), annex III.

- (c) To convene, subject to the availability of resources, a face-to-face meeting of the ad hoc technical expert group on risk assessment.

Annex

Proposed criteria for the identification and prioritization of specific issues of risk assessment of living modified organisms that may warrant future consideration

The process for recommending specific issues of risk assessment for consideration by the Parties to the Cartagena Protocol should include a stock-taking exercise **to evaluate by a structured analysis the extent to which the specific issue fulfil the criteria listed below and** to determine if resources on similar issues have been developed by national, regional and international bodies and, if so, whether such resources can be revised or adapted to the objective of the Cartagena Protocol, as appropriate, ~~and a structured analysis to evaluate the extent to which the specific issues:~~

- (a) Fall within the scope and objective of the Cartagena Protocol;
 - (b) Pose challenges to existing risk assessment frameworks and methodologies;
 - (c) ~~Involve technical knowledge and expertise that are available in the scientific community at large;~~ **[(Rationale: Not relevant)]**
 - (c~~d~~) Concern **specific well defined issues** techniques;
 - (d) **Concern specific issues** with a high pace of scientific and technological advancement;
 - (e) Concern living modified organisms that:
 - (i) Have the potential to cause serious or irreversible adverse effects on biodiversity, taking into account the urgent need to protect specific aspects of biodiversity such as an endemic/rare species, or a unique habitat or ecosystem;
 - (ii) May be introduced into the environment either deliberately or accidentally;
 - (iii) Have the potential to disseminate across territorial borders;
 - (iv) Are already, or are likely to be, commercialized or in use somewhere in the world.
-

4 Synthetic Biology

Item 5 of the provisional agenda

Item 5 was introduced to the plenary of the Vilm meeting by Margret Engelhard who also chaired the respective working group.

The participants at the Vilm meeting took note of the draft document UNEP/CBD/SBSTTA/22/4 and discussed the item. The results of the discussion are mirrored in the following changes in the document's suggested recommendation.

Document UNEP/CBD/SBSTTA/22/4:

Suggestions on the text:

SYNTHETIC BIOLOGY

Note by the Executive Secretary

BACKGROUND

abridged; continued

II. SUGGESTED RECOMMENDATIONS

20. The Subsidiary Body on Scientific, Technical and Technological Advice may wish to consider a recommendation along the following lines:

The Conference of the Parties,

Recalling decisions XII/24 and XIII/17,

1. **Welcomes** ~~Takes note of~~ the outcomes of the meeting of the Ad Hoc Technical Expert Group on Synthetic Biology held in Montreal, Canada, from 5 to 8 December 2017;¹ **[(Rationale: Changed to express appreciation)]**

2. **Recognizes** ~~Notes~~ that synthetic biology is a **rapidly developing and** cross-cutting issue that ~~may~~ **concerns** all three objectives of the Convention on Biological Diversity, and **underlines** ~~recognizes~~ the need to thoroughly consider the potential benefits and potential adverse effects of synthetic biology applications vis-à-vis the three objectives of the Convention; **[(Rationale: Changed to make the wording stronger)]**

¹ CBD/SBSTTA/22/4, annex.

3. ~~*Also notes*~~ **Recommends** that regular horizon scanning², monitoring and assessing of developments in the field of synthetic biology **including genome editing**, is **undertaken** ~~needed~~ for reviewing new information regarding the positive and negative impacts of synthetic biology vis-à-vis the three objectives of the Convention and those of its Protocols; **[(Rationale: To strengthen the para, to clarify the term “horizon scanning”, and in addition to give justice to the fact that e.g. CRISPRcas genome editing is fueling the speed of development.)]**

4. *Recognizes* that rapid advances arising from research and development in the field of synthetic biology may pose challenges to the ability of some countries, in particular those with limited experience or resources, to assess the full range of potential impacts of synthetic biology applications;

5. ~~*Also recognizes*~~ **emphasizes** the need for a coordinated **complementary and non-duplicative** approach on issues related to synthetic biology under the Convention and its Protocols, as well as among other conventions and relevant organizations and initiatives; **[(Rationale: To make language more clear, using a positive wording, and ensuring that the activities of the two bodies do not mutually impair each other’s respective activities.)]**

6. ~~*Further recognizes*~~ that, while there could be potential benefits to the development of organisms containing engineered gene drives, additional research and guidance is needed before any organism containing engineered gene drives is considered for release into the environment, including the lands and territories of indigenous peoples and local communities, and, given the current uncertainties regarding engineered gene drives,

6. Urges Parties and other Governments to take a precautionary approach in the development and release of organisms containing engineered gene drives, including experimental releases, in order to avoid potentially significant and irreversible adverse effects to biodiversity;

6bis. Recalling decision XII/24, emphasises that additional research and guidance would be [useful] [needed] before any organism containing engineered gene drives is considered for release into the environment, given the current uncertainties regarding engineered gene drives; [(Rationale: Unresolved issue between participants of the Vilm meeting.)]

6ter. Notes the conclusions of the Ad Hoc Technical Expert Group on Synthetic Biology that given the current uncertainties regarding engineered gene drives, the free prior and informed consent of indigenous peoples and local communities is needed in when considering the possible release of organisms containing engineered gene drives that may impact their traditional knowledge, innovation, practices, livelihood and use of land and water; [(Rationale: The original para was divided into three because three different topics are tackled: precautionary approach, research and guidance, and to give justice to indigenous peoples and local communities.)]

7. *Calls upon* Parties, other Governments and relevant organizations to **continue to** develop and implement ~~well-designed~~ strategies **and instruments** in order to prevent or minimize the **unintentional** exposure ~~to~~ of the environment to organisms, components and products of synthetic biology under contained use; **[(Rationale: The term “instruments” was added to not limit the message to strategies but to also emphasize the need for practical implementation measures.)]**

8. *Also calls upon* Parties, other Governments and relevant organizations to disseminate information **via inter alia the biodiversity and biosafety clearing house** **[(Rationale: Receiver of the information added.)]** and share their experiences on scientific assessments of the potential benefits and adverse impacts of synthetic biology, including that of organisms containing engineered gene drives, taking into account but not limiting themselves to information based on modelling and scenarios, data from experiments performed under contained use, and experience gained through the management of

² For the OECD definition of “horizon scanning”, see here: <http://www.oecd.org/site/schoolingfortomorrowknowledgebase/futuresthinking/overviewofmethodologies.htm>

pests and invasive alien species and from the use of living modified organisms that have been released into the environment;

9. *Decides* to extend the mandate of the Ad Hoc Technical Expert Group on Synthetic Biology and that it should work, ~~primarily online and in coordination with the process under the Cartagena Protocol,~~ **and in accordance with the terms of reference annexed here;** ~~as appropriate, to:~~ (a) ~~take stock of new developments in synthetic biology since the Ad Hoc Technical Expert Group's last meeting in order to support a regular horizon scanning process;~~ (b) ~~prepare a comprehensive review of the current state of knowledge by compiling and analysing information, including but not limited to peer-reviewed published literature, on the potential positive and negative environmental, cultural, and socioeconomic impacts of current and near future applications of synthetic biology, including genome editing and organisms containing engineered gene drives;~~ (c) ~~prepare a forward looking analysis on potential positive and negative impacts of synthetic biology applications that are in early stages of research and development;~~ and (d) ~~prepare a report on the outcomes of its work for consideration by the Subsidiary Body on Scientific, Technical and Technological Advice;~~ **[(Rationale: The deleted section is moved to a new annex 2.)]**

9bis. Decides to establish processes and modalities for future technical and regular horizon scanning, monitoring and assessment depending on the availability of resources; [(Rationale: Added to give justice to para. 3, where the horizon scanning is introduced, and to establish a coherent and consistent procedure for the purpose of assessing the impact on the three objectives of the CBD; the COP is the appropriate body to decide on the efficient way to perform this task.)]

10. *Also decides* to extend the Open-ended Online Forum on Synthetic Biology to support the deliberations of the Ad Hoc Technical Expert Group on Synthetic Biology, and *invites* Parties, other Governments, indigenous and local communities and relevant organizations to continue to nominate experts to take part in the online forum on synthetic biology;

11. *Invites* Parties, other Governments, relevant organizations, indigenous peoples and local communities, and other relevant stakeholders to provide the Executive Secretary with relevant information **related to the activities referred to for inclusion in the review referred to in paragraph 9 including the annexed terms of reference and para 9bis above; [(Rationale: Edited to extend the scope of information to all relevant activities.)]**

12. *Requests* the Executive Secretary:

(a) To convene moderated online discussions under the Open-ended Online Forum on Synthetic Biology;

(b) To facilitate the work of the Ad Hoc Technical Expert Group on Synthetic Biology, subject to the availability of funds, by, among other things, collecting and synthesizing and arranging for peer review of relevant information, and convening at least one face-to-face meeting;

(b-bis) To update the Technical Series on Synthetic Biology; [(Rationale: Added to take into account the new developments in synbio.)]

(c) To further pursue cooperation with other organizations, conventions and initiatives, including academic and research institutions, from all regions, on issues related to synthetic biology and how it may contribute to progress towards the 2030 Agenda for Sustainable Development;³

(d) To explore ways to facilitate, promote and support capacity-building and knowledge sharing regarding synthetic biology, taking into account the needs of Parties and of indigenous peoples and local communities, including through necessary funding, and the co-design of training materials in the official languages of the United Nations and, where possible, in local languages.

³ [General Assembly resolution 70/1](#), annex.

13. *Requests* the Subsidiary Body on Scientific, Technical and Technological Advice to consider the work of the Ad Hoc Technical Expert Group on Synthetic Biology and submit a recommendation to the Conference of the Parties at its fifteenth meeting.

Annex 1

OUTCOMES OF THE AD HOC TECHNICAL EXPERT GROUP (AHTEG) ON SYNTHETIC BIOLOGY

abridged; continued

Annex 2

TERMS OF REFERENCE FOR THE AD HOC TECHNICAL EXPERT GROUP (AHTEG) ON SYNTHETIC BIOLOGY

The Ad Hoc Technical Expert Group on Synthetic Biology shall:

(a) take stock of new developments in synthetic biology since the Ad Hoc Technical Expert Group's last meeting in order to recommend methodologies for a future regular horizon scanning, monitoring and assessment process;

(b) undertake a review of the current state of knowledge by analysing information, including but not limited to peer-reviewed published literature, on the potential positive and negative environmental, cultural, and socioeconomic impacts of current and near future applications of synthetic biology, including organisms containing engineered gene drives;

(c) prepare a forward-looking analysis on potential positive and negative impacts of synthetic biology applications that are in early stages of research and development; and

(d) prepare a report on the outcomes of its work for consideration by the Subsidiary Body on Scientific, Technical and Technological Advice;

[(Rationale: The technical expertise of the Ad Hoc Technical Expert Group on Synthetic Biology should be used to suggest effective horizon scanning methodologies. Genome editing is deleted because it has a wider range but when it is used in synthetic biology as a tool it is covered. In addition it is added in para. 3 above.)]

5 Updated Scientific Assessment of Progress towards Selected Aichi Biodiversity Targets and Options to Accelerate Progress

Item 6 of the provisional agenda

Item 6 was introduced to the plenary of the Vilm meeting by Vincent Fleming who also chaired the respective working group.

The participants at the Vilm meeting discussed the suggested recommendations in document UNEP/CBD/SBSTTA/22/5. The results of the discussion are mirrored in the following changes in the document's suggested recommendation.

Document UNEP/CBD/SBSTTA/22/5:

Suggestions on the text:

UPDATED SCIENTIFIC ASSESSMENT OF PROGRESS TOWARDS SELECTED AICHI BIODIVERSITY TARGETS AND OPTIONS TO ACCELERATE PROGRESS

Note by the Executive Secretary

BACKGROUND

abridged; continued

IV. DRAFT RECOMMENDATION

39. The Subsidiary Body on Scientific, Technical and Technological Advice may wish to adopt a recommendation along the following lines:

The Subsidiary Body on Scientific, Technical and Technological Advice

1. Welcomes the regional assessments of biodiversity and ecosystem services for Africa, the Americas, Asia and the Pacific, and Europe and Central Asia and the thematic assessment on land degradation **and restoration** of the Intergovernmental Science-Policy Platform for Biodiversity and Ecosystem Services;

1bis. Recognizes that any future regional assessments need to be better resourced in order to provide greater consistency between regions;

2. Takes note of the review of updated scientific information, including the possible options to accelerate progress towards the achievement of the Aichi Biodiversity Targets, **noting that progress on most targets is still insufficient to achieve the 2020 targets;**

3. Requests the Executive Secretary to consider the regional assessments of biodiversity and ecosystem services for Africa, the Americas, Asia and the Pacific, and Europe and Central Asia and the

thematic assessment on land degradation **and restoration** of the Intergovernmental Science-Policy Platform for Biodiversity and Ecosystem Services and other relevant information, including the updated scientific assessment of progress towards the Aichi Biodiversity Targets, when preparing documentation related to the post-2020 global biodiversity framework and the fifth edition of the *Global Biodiversity Outlook*;

4. *Recommends* that the Conference of the Parties at its fourteenth meeting adopt a decision along the following lines:

The Conference of the Parties,

Being deeply concerned that, despite many positive actions by Parties, most of the Aichi Biodiversity Targets are not on track to be achieved by 2020 which, in turn, will jeopardize the achievement of the Mission of the Strategic Plan for Biodiversity 2011-2020 and the Sustainable Development Goals;

Recalling the urgency to enhance efforts to achieve targets related to restoration and the short-term action plan on ecosystem restoration adopted by the Parties¹;

Also recalling decisions III/11, V/5, and VIII/23 that endorse a framework for action in support of the International Initiative for the Conservation and Sustainable Use of Soil Biodiversity from FAO;

Recalling decision ~~XIII/28~~, in which it decided that the list of indicators for the Strategic Plan for Biodiversity 2011-2020 should be kept under review²,

1. **Welcomes** ~~Notes~~ the additional indicators which have been identified and those which have updated data points, **acknowledges the work of the Biodiversity Indicators Partnership in updating these,** and *encourages* Parties, other Governments, relevant organizations, indigenous peoples and local communities and stakeholders to make use of them, as appropriate;

2. *Encourages* Parties and invites other Governments and relevant organizations to make use of the regional and thematic assessments, **and their key messages,** of the Intergovernmental Science-Policy Platform for Biodiversity and Ecosystem Services, including by using them to inform actions at the national level and to develop complementary national, subnational or thematic assessments of biodiversity and ecosystem services;

3. Urges Parties and invites other Governments to undertake urgent action by 2020 on those Aichi Biodiversity Targets, or elements within targets, for which progress needs to be accelerated to meet the Aichi Biodiversity Targets including making use of the possible options annexed to this Decision;

4. Encourages Parties, invites other Governments, relevant organizations, indigenous peoples and local communities and stakeholders to also make use of the information referred to above [(Comment: In paragraphs 1 and 2)] when developing proposals for the post-2020 framework;

5. Requests the Executive Secretary to communicate, through the UN system, the High Level Political Forum for Sustainable Development, and other multi-lateral environmental agreements, that the achievement of the Mission of the Strategic Plan and the Sustainable Development Goals is at risk and, therefore, urgent action by Parties is required to achieve the Aichi Biodiversity Targets.

~~3. Encourages Parties and other Governments to make use of the possible options to accelerate progress towards the Aichi Biodiversity Targets as contained in section II and annex II of the note by the Executive Secretary on an updated scientific assessment of progress towards selected Aichi Biodiversity Targets and options to accelerate progress;³~~

¹ Decision [XII/5](#)

² Decision [XIII/28](#)

4. ~~Encourages Parties, other Governments, relevant organizations, indigenous peoples and local communities and stakeholders to share their experiences regarding effective action to implement the Strategic Plan for Biodiversity 2011–2020, including by communicating this information through the sixth national reports;~~

abridged; continued

Annex II

POSSIBLE OPTIONS TO ACCELERATE PROGRESS TOWARDS THE ACHIEVEMENT OF THE AICHI BIODIVERSITY TARGETS

1. The present annex contains information on possible actions that could be taken, depending on national circumstances and priorities, to facilitate the achievement of the Aichi Biodiversity Targets.
2. The possible actions, based on the findings of the IPBES regional and thematic assessments and on the conclusions identified from scientific literature,³ include:

abridged; continued

(e) Improving awareness of biodiversity **and the inter-dependencies of the global challenges** through enhanced communication and education and taking actions to bring about behavioural **and policy** change;

abridged; continued

(n) **Favouring and investing in the development and** ~~Promoting~~ the use of nature-based solutions, such as **ecosystem natural**-restoration, increasing pollinator diversity, including natural land in agricultural systems, and other ~~integrated~~ ecosystem-based approaches, to address societal challenges.

³ The actions identified in this note should be viewed in relation to the guidance already developed by the Conference of the Parties, including decision X/2 on the Strategic Plan for Biodiversity 2011–2020 and its technical rationale (UNEP/CBD/COP/10/27/Add.1), as well as the implementation needs identified by the Conference of the Parties in decision XII/1.

6 Protected Areas and Other Measures for Enhanced Conservation and Management

Item 7 of the provisional agenda

Item 7 was introduced to the plenary of the Vilim meeting by Kathleen MacKinnon who also chaired the respective working group.

The participants at the Vilim meeting took note of the document UNEP/CBD/SBSTTA/22/6 and discussed the item. The results of the discussion are mirrored in the following changes in the document's suggested recommendation.

Document UNEP/CBD/SBSTTA/22/6:

Suggestions on the text:

PROTECTED AREAS AND OTHER MEASURES FOR ENHANCED CONSERVATION AND MANAGEMENT

Note by the Executive Secretary

INTRODUCTION

abridged; continued

SUGGESTED RECOMMENDATIONS

The Subsidiary Body on Scientific, Technical and Technological Advice

1. *Welcomes* the voluntary guidance on the integration of protected areas and other effective area-based conservation measures into the wider land- and seascapes and mainstreaming across sectors, as well as the voluntary guidance on governance and equity, contained in annexes I and II, respectively, to the present draft recommendation;¹

2. *Adopts* the scientific and technical advice on definition, management approaches and identification of other effective area-based conservation measures and their role in achieving Aichi Biodiversity Target 11 contained in annex III to the present draft recommendation.²

3. **Welcomes the work of the International Union for Conservation of Nature and other expert bodies in helping to operationalize the concept of other effective area-based conservation**

¹ CBD/SBSTTA/22/6, annexes I and II (**Voluntary guidance on the integration of Protected areas and Other Effective area-based Conservation Measures into wider land and seascapes and Mainstreaming across sectors to contribute, inter alia to the sustainable development goals**) and II (**Voluntary Guidance on effective governance models for management of protected areas, including equity taking into account work being undertaken under Article 8(i).**)

² CBD/SBSTTA/22/6, annex III (**Scientific and technical advice on definition, management approaches and identification of Other effective area-based conservation measures and their role in achieving Aichi biodiversity Target 11).**)

measures; [(Rationale: Recognise the role of IUCN and others in work done to develop the concept and the various guidance on OECM.)]

4. Takes note of the considerations in achieving Aichi biodiversity target 11 in marine and coastal areas, contained in annex IV to the present draft recommendation. [(Rationale: The call on consideration of Annex 4 has been moved up from the COP part as it seems more appropriate for SBSTTA then for COP.)]

The Subsidiary Body on Scientific, Technical and Technological Advice recommends that the Conference of the Parties at its fourteenth meeting adopts a decision along the following lines:

The Conference of the Parties

1. Welcomes the voluntary guidance on integration of protected areas and other effective areas-based conservation measures into the wider land- and seascapes and on mainstreaming these into sectors, as well as the voluntary guidance on governance and equity, contained in annexes I and II, respectively, to the present draft decision;¹

~~2. Adopts the scientific and technical advice on definition, management approaches and identification of other effective area-based conservation measures and their role in achieving Aichi Biodiversity Target 11, contained in annex III to the present draft decision;² [(Rationale: This paragraph has been moved down for reasons of logical order; paragraphs relating to Annex I and II were grouped; as well as those for Annex III.)]~~

~~23. Encourages Urges~~ Parties to apply the voluntary guidance **contained in Annex I and II on integration and mainstreaming, and governance and equity of protected areas and other effective area-based conservation measures**, as appropriate, in accordance with their national circumstances, relevant national legislation, policies programmes and applicable international law; **[(Rationale: As para 1 “welcomes” the Annexes, “urges” is considered to be too strong.)]**

3. Adopts the scientific and technical advice on definition, management approaches and identification of other effective area-based conservation measures and their role in achieving Aichi Biodiversity Target 11, contained in annex III to the present draft decision; [(Rationale: This paragraph has been moved down for reasons of logical order; paragraphs relating to Annex I and II were grouped; as well as those for Annex III.)]

4. ~~Encourages Invites~~ Parties to apply the scientific and technical advice on other effective area-based conservation measures, including by: **[(Rationale: As para 3 “adopts” the advice, “invites” is considered to be too weak.)]**

(a) Identifying other effective area-based conservation measures and their diverse options within their jurisdiction;

~~(b) Sharing this information with Parties, other Governments and organizations via the clearing house mechanism of the Convention on Biological Diversity and the Executive Secretary; [(Rationale: This para is not needed as the data is to be submitted to WDPA (para b new) and the sharing of experiences are captured in para 8 old/new 5.)]~~

~~(be)~~ Submitting data on national other effective area-based conservation measures to the United Nations Environment Programme's World Conservation Monitoring Centre **to be included** in order to update the World Database on Protected Areas;

5. Encourages Parties to share case studies/best practices and examples of management approaches, governance types and effectiveness related to other effective area-based conservation measures, including experiences with the application of the guidance, through the clearing-house mechanism of the Convention and other means; [(Rationale: This para has been moved up (from old para 8).)] Encourages Parties, other Governments, relevant organizations and indigenous peoples and local communities to take into account the

considerations, as compiled in the note by the Executive Secretary,³ in achieving Aichi Biodiversity Target 11 in marine and coastal areas in their efforts to achieve all elements of Aichi Biodiversity Target 11 in marine and coastal areas; **[(Rationale: This para has been moved to the SBSTTA part as it is considered more adequate that SBSTTA takes note for technical/scientific advice (as this is what Annex III is).)]**

6. *Invites* the International Union for Conservation of Nature and the World Conservation Monitoring Centre to **expand upgrade** **[(Rationale: Data on OECM is expanding the WDPA, “upgrade” implies a quality issue, which is not adequate here.)]** the World Database on Protected Areas by providing a section on other effective area-based conservation measures and to work with Parties and other Governments on the basis of their analysis of other effective area-based conservation measures at the national level in order to update the World Database on Protected Areas accordingly; **[(Rationale: Duplication of wording with 4 b).)]**

7. **Further invites** the International Union for Nature Conservation and other expert bodies to continue to assist Parties to identify other effective area-based conservation measures and to apply the guidance; **[(Rationale: Link to SBSTTA part, 3. Para.)]**

8. *Requests* the Executive Secretary, **subject to available resources, and** in collaboration with partners, Parties, other Governments, and relevant organizations **to provide capacity-building to enable the application of the guidance contained in Annexes I, II and III to the present draft decision.** **[(Rationale: Moved up from (a) and reformulated to make clear to what the guidance refers to.)]**

(a) — To provide capacity building to enable the application of the guidance developed in response to paragraphs 9(a)(i-iv), 10(a) and 10(b) of decision [XIII/2](#); **[(Rationale: Moved up to 8.)]**

(b) — To systematically collect information on other effective area-based conservation measures, to facilitate mapping and showcase their contribution to Aichi Biodiversity Target 11 and to disseminate this information through the clearing-house mechanism of the Convention and relevant publications; **[(Rationale: Duplication to para 6)]**

8. — *Encourages* Parties to share case studies/best practices and examples of management approaches, governance types and effectiveness related to other effective area-based conservation measures, including experiences with the application of the guidance, through the clearing-house mechanism of the Convention and other means. **[(Rationale: Has been moved up)]**

abridged; continued

Annex III

SCIENTIFIC AND TECHNICAL ADVICE ON DEFINITION, MANAGEMENT APPROACHES AND IDENTIFICATION OF OTHER EFFECTIVE AREA-BASED CONSERVATION MEASURES AND THEIR ROLE IN ACHIEVING AICHI BIODIVERSITY TARGET 11 (DECISION [XIII/2](#), PARA. 10(B))

A. DEFINITION

“Other effective area-based conservation measure” means “A geographically defined area other than a Protected Area, which is governed and managed in ways that achieve positive and sustained long-term outcomes **[(Rationale: Equivalent to the wording in the criteria table; important to stress as to make clear**

³ CBD/SBSTTA/22/6.

that a long-term perspective is intended.)) for the in situ conservation of biodiversity,⁴ with associated ecosystem services and cultural and spiritual values”.

B. GUIDING PRINCIPLES

The definition, guiding principles and criteria for identification of OECMs are applicable across all ecosystems, and identification should be on a case-by-case basis. [(Rationale: Principle f) has been moved up.)]

~~Guiding general principles should be applied in a flexible way and on a case by case basis.~~

(a) Other effective area-based conservation measures (OECMs) have a **significant** biodiversity value, which is the basis for their consideration to achieve Target 11 of Strategic Goal C of the Strategic Plan for Biodiversity 2011 and 2020;

(b) OECMs reflect an opportunity to provide in situ conservation of biodiversity over the long term **in marine, terrestrial and freshwater ecosystems. [(Rationale: General applicability)]** They may allow for sustainable human activity while offering a clear benefit to biodiversity conservation and avoiding negative impacts on biodiversity. By recognizing an area, there is an incentive for sustaining existing biodiversity values and improving biodiversity conservation outcomes;

(c) OECMs deliver biodiversity outcomes that are comparable with and complementary to those of protected areas; **this includes their contribution to representativeness, the coverage of areas important for biodiversity an associated ecosystem services, connectivity and integration in wider landscapes and seascapes, as well as management effectiveness and equity requirements (see section Criteria); [(Rationale: Substance needed to be added to explain what is meant by “comparable” und “complementary”).]**

(d) OECMs demonstrate positive biodiversity outcomes by **successfully conserving in-situ species, habitats and ecosystems and associated ecosystem services, while** preventing, reducing or eliminating ~~existing, or reasonably anticipated main threats, and strengthening existing protections.~~ OECM management is consistent with the ecosystem approach and the precautionary principle, providing the ability to adapt to achieve biodiversity outcomes, including long-term outcomes, and including the ability to manage a new threat; **[(Rationale: Need to specify what biodiversity outcomes are intended.)]**

(e) **As** OECMs **can** help deliver greater representativeness and connectivity in protected area systems ~~they and thus~~ may help address larger and pervasive threats and enhance resilience, including with regard to climate change;

~~(f) — Definition and criteria for identification of OECMs is applicable across all ecosystems, and identification should be on case by case basis; [(Rationale: has been moved up)]~~

(g) **Recognition of OECMs should follow appropriate consultation with relevant governance authorities, stakeholders and the public; [(Rationale: has been moved up)]**

(h) Recognition of OECMs in areas within the territories of indigenous peoples and local communities should be **based on self-identification and/or consultation in order to obtain** ~~on the basis of self identification and require their free, prior and informed consent;~~ **[(Rationale: Adapted to standard language)]**

~~(h) — Recognition of OECMs should follow appropriate consultation with relevant governance authorities, stakeholders and the public;~~

(i) Areas conserved for cultural and spiritual values, and governance and management that respect and are informed by cultural and spiritual values, often result in positive biodiversity outcomes;

(j) OECMs recognize, promote and make visible the roles of different governance systems and actors in biodiversity conservation **and can include a range of social and ecological benefits, including empowerment of indigenous peoples and local communities; [(Rationale: Merging (j) and old (k))]**

⁴ As defined by Article 2 of the Convention on Biological Diversity and in line with the provisions of the Convention.

(k) ~~Incentives to ensure effectiveness can include a range of social and ecological benefits, including empowerment of indigenous peoples and local communities; [(Rationale: Not needed, has been re-worded in (j).)]~~

(l) The best available scientific information, including indigenous and local knowledge, should be used for recognizing OECMs, delimiting their location and size, informing management approaches and measuring performance.

C. CRITERIA FOR IDENTIFICATION

Criterion A: Area is not currently recognized as a protected area	
Not a protected area	<ul style="list-style-type: none"> The area is not currently recognized or reported as a protected area or part of a protected area; it may have been established for another purpose.
Criterion B: Area is governed and managed	
Geographically defined space	<ul style="list-style-type: none"> Size and area are described, including in three dimensions where necessary. Boundaries are described.
Legitimate governance authorities (see Annex II)	<ul style="list-style-type: none"> Governance has legitimate authority and is appropriate for achieving in situ conservation of biodiversity within the area. Governance by indigenous peoples and local communities is self-identified and peer-reviewed. Governance reflects the equity considerations adopted in the Convention. Governance may be by a single authority or through collaboration among relevant authorities and provides the ability to address threats collectively.
Managed	<ul style="list-style-type: none"> Relevant authorities are identified and involved in management and responsible authorities are identified. [(Rationale: Covered by the Governance section)] A management (system) is in place that contributes to sustaining the in situ conservation of biodiversity. <u>The management should involve consultation and participation of relevant stakeholders as appropriate. [(Rationale: Has been inserted as this is also in the guiding principles.)]</u> <u>Mechanisms, such as policy frameworks and regulations, as appropriate, are in place to recognize and respond to new threats. [(Rationale: Has been moved up from the effectiveness section.)]</u> <u>To the extent possible, management inside and outside the OECM is integrated. [(Rationale: Reference to Annex I.)]</u> Management is consistent with the ecosystem approach with the ability to adapt to achieve biodiversity outcomes, including long-term outcomes, and including the ability to manage a new threat.
Criterion C: Achieves sustained and effective contribution to in situ conservation of biodiversity	
Effective	<ul style="list-style-type: none"> The area achieves, or is expected to achieve, positive and sustained outcomes for the in situ conservation of biodiversity. Current threats are well understood <u>and addressed effectively.</u> Significant threats are addressed effectively. Mechanisms, such as policy frameworks and regulations, are in place to recognize and respond to new threats. To the extent possible, management inside and outside the OECM is integrated. [(Rationale: Moved to Management section.)]
Sustained over long term	<ul style="list-style-type: none"> The OECM is in place for the long term or is likely to be. "Sustained" pertains to the continuity of governance and management and "long term" pertains to the <u>biodiversity</u> outcome.

<u>In-situ conservation of biodiversity</u>	<ul style="list-style-type: none"> • <u>Recognition of OECM is expected to include the identification of the range of biodiversity attributes for which the site is considered to be important e.g. communities of rare, threatened or endangered species, representative natural ecosystems, range-restricted species, Key Biodiversity Areas, areas providing critical ecosystem services, areas for ecological connectivity. [(Rationale: This criterion is needed as the in-situ conservation of biodiversity is the key element of the definition.)]</u>
Information and monitoring	<ul style="list-style-type: none"> • Identification of an OECM should, to the extent possible, document the known biodiversity attributes <u>as well as</u>, including cultural and/or spiritual values, of the area and the governance and management in place as a baseline for assessing effectiveness. • <u>Adequate monitoring to</u> A monitoring system informs management measures with respect to biodiversity. <u>[(Rationale: Management systems seems too demanding; the essential is to have monitoring integrated into management.)]</u> • Processes should be in place to evaluate the effectiveness of governance and management, including with respect to equity. <u>[(Rationale: Is covered in the Governance section)]</u>
Criterion D: Associated ecosystem services and cultural and spiritual values	
Ecosystem services	<ul style="list-style-type: none"> • <u>Management of OECM should include the identification and preservation of (associated) ecosystem services. [(Rationale: Broader approach to ES related to management.)]</u> • <u>Management to enhance one particular ecosystem service should not impact negatively on the site's overall biodiversity. [(Rationale: Text from the IUCN Guidelines; need to make sure that biodiversity values are kept intact.)]</u> • Ecosystem services are supported, particularly those of importance to indigenous peoples and local communities, taking into account interactions and trade-offs among ecosystem services, with a view to ensuring positive biodiversity outcomes and equity.
Cultural and spiritual values	<p><u>Where appropriate,</u></p> <ul style="list-style-type: none"> • <u>gGovernance and management measures identify, respect and uphold the cultural and spiritual significance and values of the area.</u> • <u>gGovernance and management measures respect and uphold the knowledge, practices and institutions that are fundamental for the in situ conservation of biodiversity. [(Rationale: As cultural and spiritual values do not apply to all OECMs.)]</u>

D. FURTHER CONSIDERATIONS

1. Management approaches

(a) OECMs are diverse in terms of purpose, design, governance, ~~stakeholders participants~~ and management, especially as they **may** consider associated cultural and spiritual values. Accordingly, management approaches for OECMs are and will be diverse;

(b) Some OECMs ~~may be~~ **are** established, recognized or managed to intentionally sustain in situ conservation of biodiversity. This purpose is either the primary management objective, or part of a set of intended management objectives; **[(Rationale: Consistency with (c).)]**

(c) ~~Other Some~~ **Other** OECMs may be established, recognized or managed primarily for purposes other than in situ conservation of biodiversity. Thus their contribution to in situ conservation of biodiversity is a co-benefit to their primary intended management objective or purpose. ~~However, where a contribution to in situ conservation of biodiversity is incidental to the primary stated purpose of the~~

~~OECM, i~~ It is desirable that this contribution become a recognized objective of the management of the OECM;

(d) ~~In all cases w~~ Where in situ conservation of biodiversity is recognized as a management objective, specific management measures should be defined and enabled;

(e) Monitoring the effectiveness of OECMs is needed. This should include: (i) baseline data, such as documentation of the biodiversity values and elements; (ii) on-going community-based monitoring and incorporation of traditional knowledge; (iii) monitoring over the long term, including how to sustain biodiversity and improve in situ conservation; and (iv) monitoring of governance, stakeholder involvement and management systems that contribute to the biodiversity outcomes. [(Rationale: This has been moved up from the “guidance” section as it is essential to have monitoring as part of management and most of the guidance is already existing.)]

2. Role in achieving Aichi Biodiversity Target 11

(a) By definition, OECMs **that fulfil the criteria listed above** contribute to both quantitative (i.e. the 17% and 10% coverage elements) and qualitative elements (i.e. representativity, coverage of areas important for biodiversity, connectivity and integration in wider landscapes and seascapes, management effectiveness and equity) of Aichi Biodiversity Target 11;

(b) Since OECMs are diverse in terms of purpose, design, governance, **stakeholders**, and management, they will often also contribute to other Aichi Biodiversity Targets, targets of the 2030 Agenda for Sustainable Development, **the Sendai Framework for Action for Disaster Risk Reduction**, and the objectives or targets of other multilateral environmental agreements.⁵ **[(Rationale: Very relevant, as the Sendai Framework also took biodiversity into account.)]**

3. Additional guidance

~~(a) Further screening and evaluation tools need to be developed in the light of experiences acquired as a result of the application of this guidance;~~

~~(b) Monitoring the effectiveness of OECMs needs more guidance, information sharing, networking and sharing of available tools, and development of new tools where necessary. This guidance could include: (i) baseline data, such as documentation of the biodiversity values and elements; (ii) ongoing community-based monitoring and incorporation of traditional knowledge; (iii) monitoring over the long term, including how to sustain biodiversity and improve in situ conservation; and (iv) monitoring of governance and management systems that contribute to the biodiversity outcomes;~~

~~(c) Manuals for reporting in the World Database on Protected Areas, the registry of territories and areas conserved by indigenous peoples and local communities maintained by the United Nations Environment Programme’s World Conservation Monitoring Centre, and other guidance documents of the Convention on Biological Diversity and, as appropriate, sectoral agencies provide useful guidance for reporting OECMs;~~

~~(d) While the contribution of OECMs to the quantitative elements of Target 11 are relatively straightforward to assess, further studies and guidance are needed to better understand and communicate how their contribution to qualitative elements of Target 11 can be enhanced;~~

~~(e) Further studies to better understand and communicate the full range of OECM contributions to other targets, and engagement with other sectors;~~

~~(f) Further guidance is needed concerning the size of individual areas, and areas that are part of networks, needed to achieve biodiversity outcomes;~~

Further guidance is needed on how OECMs of indigenous people and local communities are recognized and supported. [(Rationale: Not necessary as this is a scientific/technical advice and not a “shopping list” for further studies; (b) is captured in the management section.)]

abridged

⁵ CBD/PA/EM/2018/1/INF/4 provides many examples of these contributions.

7 Marine and Coastal Biodiversity: Ecologically or Biologically Significant Marine Areas, Addressing Anthropogenic Underwater Noise and Marine Debris, Biodiversity in Cold-Water Areas and Marine Spatial Planning

Item 8 of the provisional agenda

Item 8 was introduced to the plenary of the Vilm meeting by Janos Hennicke who also chaired the respective working group.

The participants at the Vilm meeting took note of the document UNEP/CBD/SBSTTA/22/7 and discussed the item. The results of the discussion are mirrored in the following changes in the document's suggested recommendations.

Document UNEP/CBD/SBSTTA/22/7:

Suggestions on the text:

MARINE AND COASTAL BIODIVERSITY

Note by the Executive Secretary

I. PROGRESS REPORT ON DESCRIBING AREAS MEETING THE CRITERIA FOR ECOLOGICALLY OR BIOLOGICALLY SIGNIFICANT MARINE AREAS

abridged; continued

IV. SUGGESTED RECOMMENDATIONS

29. The Subsidiary Body on Scientific, Technical and Technological Advice may wish to recommend that the Conference of the Parties at its fourteenth meeting adopt a decision along the following lines:

The Subsidiary Body on Scientific, Technical and Technological Advice

1. Requests the Executive Secretary as a follow-up of decision XIII/12 para. 13 to provide information on the experiences in undertaking scientific and technical analysis of the status of marine and coastal biodiversity in areas in their respective jurisdictions or mandates described as meeting the EBSA criteria and contained in the EBSA repository, recalling decision XII/22 para. 8 and 11 to make use, as appropriate, of areas meeting EBSA criteria when carrying out marine spatial planning, development of representative networks of marine protected areas and application of other area-based management measures in marine and coastal areas with a view to contributing to national efforts to achieve the Aichi Biodiversity Targets;

2. Requests the Executive Secretary as a follow-up of decision XIII/12 para. 14 to provide information on measures taken to ensure conservation and sustainable use by implementing relevant tools in accordance with national law including area-based management

tools such as marine protected areas, environmental impact assessments, and strategic environmental assessments and fisheries management measures;

3. Requests the Executive Secretary, in consultation with the Informal Advisory Group, to consider the need to revise the Terms of Reference of the Informal Advisory Group based on recommendations with respect to the tasks and responsibilities outlined concerning modifying existing and describing new EBSAs as proposed in the Annex to the draft COP decision, and submit draft amendments, as appropriate, for consideration and decision by COP 14.

The Conference of the Parties

Ecologically or biologically significant marine areas

1. [Welcomes] [**Takes note of**] **the scientific and technical information contained in the summary reports prepared by the Subsidiary Body on Scientific, Technical and Technological Advice at its twenty-second meeting, annexed to the present draft decision, based on the reports of the two regional workshops for describing ecological or biologically significant marine areas for Black Sea and Caspian Sea, and Baltic Sea,¹ and requests the Executive Secretary to include the summary reports in the EBSA repository, and to submit them to the United Nations General Assembly and its relevant processes, as well as Parties, other Governments and relevant international organizations in line with the purpose and procedures set out in decisions X/29, XI/17, XII/22 and XIII/12; [(Rationale: One of the Vilm participants has some reservations about the outcomes of the Baltic Seas Summary Report.)]**

2. Also welcomes the report of the Expert Workshop on to Develop Options for Modifying the Description of Ecologically or Biologically Significant Marine Areas, for Describing New Areas, and for Strengthening the Scientific Credibility and Transparency of this Process,² held in Berlin from 5 to 8 December 2017, and [**takes note of**] the set of options as contained in the annex to the present draft decision:³ **[(Rationale: Depending on the outcomes of the discussions about the set of options outlined in the Annex, the annex can be endorsed or taken note of.)]**

(a) For cases both within and beyond national jurisdiction, regarding procedures within the Convention to modify the description of areas meeting the EBSA criteria and to describe new areas, while fully respecting the sovereignty, sovereign rights and jurisdiction of coastal States;

(b) For strengthening the scientific credibility and transparency of the EBSA process, including by enhancing the scientific peer review by Parties, other Governments and relevant organizations;

3. Requests the Executive Secretary to work with Parties, other Governments and relevant organizations to facilitate the implementation of this set of options, as contained in annex I, through the provisioning of scientific and technical support to Parties, other Government and relevant organizations, as appropriate;

4. Calls for further collaboration and information-sharing among the Secretariat of the Convention on Biological Diversity, the Food and Agriculture Organization of the United Nations, and regional fishery bodies regarding the use of scientific information on areas meeting the criteria for ecologically or biologically significant marine areas and vulnerable marine ecosystems in support of achieving various Aichi Biodiversity Targets;

Other matters

5. Takes note of the continued work of the Executive Secretary on the compilation and synthesis of information related to (a) the impacts of anthropogenic underwater noise on marine and coastal biodiversity and means to minimize and mitigate these impacts and (b) experiences with the application of marine spatial planning, and encourages Parties, other Governments and relevant

¹ CBD/EBSA/WS/2017/1/3 and CBD/EBSA/WS/2018/1/4.

² CBD/EBSA/EM/2017/1/3.

³ Contained in CBD/SBSTTA/22/7.

organizations to **take action to minimize and mitigate impacts of anthropogenic underwater noise and in implementing MSP using** ~~make use of this information;~~ **[(Rationale: To stress the importance to take actions.)]**

5bis. Recalling decision XIII/10 on marine debris, decision XIII/11 on cold-water areas, and highlighting the outcomes of the UN Conference on Oceans to implement SDG 14, urges Parties to take forward their efforts with regards to minimizing or mitigating the impacts of marine debris on marine and coastal biodiversity, seafloor-mining on marine biodiversity, and the protection of cold-water areas; [(Rationale: These topics were not touched upon in the document but are pressing issues for marine conservation.)]

5ter. Requests the Executive Secretary to inform the UNEA Ad Hoc Open Ended Expert Group on the work of the Convention on marine litter and also to participate in the work of the UNEA Ad Hoc Open Ended Expert Group⁴, as relevant;

5squat. Welcomes the work of the Executive Secretary to compile the information on mainstreaming of biodiversity in fisheries, including through the ecosystem approach to fisheries [(Insert footnote to info doc)], and encourages Parties, other Governments and relevant organizations to make use of this information; [(Rationale: Refers to para. 26)]

abridged; continued

Annex

OPTIONS FOR MODIFYING THE DESCRIPTION OF ECOLOGICALLY OR BIOLOGICALLY SIGNIFICANT MARINE AREAS, FOR DESCRIBING NEW AREAS, AND FOR STRENGTHENING THE SCIENTIFIC CREDIBILITY AND TRANSPARENCY OF THIS PROCESS

I. MODIFICATION OF EXISTING EBSAS

A. Modification in the current process

abridged; continued

B. Possible reasons for modification of existing EBSA description

2. Possible reasons for the ~~potential~~ modification of existing EBSAs, could include the following:

- (a) There has been newly available/accessible scientific and technical information, including traditional knowledge, on existing features or on new features associated with an existing area;
- (b) There have been changes in the information being provided by other intergovernmental processes, which were used in the application of the EBSA criteria;
- (c) Advanced expertise, methodological approaches or analytical methods that have emerged;

⁴ **Noting UNEA-3 resolution 3/7 on marine litter and microplastics and in particular the invitation to relevant international and regional organizations and conventions including inter alia the Convention on Biological Diversity, to as appropriate within their mandates, to increase their action to prevent and reduce marine litter and microplastics and their harmful effects, and coordinate where appropriate to achieve this end, as well as the decision to convene an UNEA Ad Hoc Open Ended Expert Group, to further examine the barriers to, and options for, combating marine plastic litter and microplastics from all sources, especially land based sources.**

(d) There has been a change in the ecological or biological feature(s) of an EBSA, which may lead to the change in the ranking of the area against the EBSA criteria or the change in the polygon of the area;

(e) Scientific errors in existing descriptions;

(f) Modifications or additions to the format and categories of information in the EBSA template, as agreed to by the Conference of the Parties.

C. Actors that can propose modification of existing EBSA description

3. The following actors could propose **at any time** a modification of existing EBSAs:

(a) For EBSAs within national jurisdiction: relevant State;

[[Comment: For para. 3. (b), the participants of the Vilm meeting formulated the following two alternative options:]]

(b) For EBSAs within the national jurisdiction of multiple States: one or more relevant States or all relevant States concerned by the modification; **[(Option 1)]**

(b) For EBSAs within the national jurisdiction of multiple States: all relevant States concerned by the modification; [(Option 2. Rationale: All relevant States should agree on the proposal.)]

(c) For EBSAs in ABNJ: any State and/or competent intergovernmental organization(s) **such as RFMOs, RSCs and regional seas agreements**;

[[Comment: For para. 3. (d), the participants of the Vilm meeting formulated the following two alternative options:]]

(d) For EBSAs with features in areas both within and beyond national jurisdiction: relevant State(s) and/or competent intergovernmental organizations; **[(Option 1)]**

(d) For EBSAs with features in areas both within and beyond national jurisdiction: all relevant States and/or competent intergovernmental organizations, to which all relevant States are members; [(Option 2. Rationale: all relevant States should agree on the proposal)]

4.(d) Knowledge holders, including scientific research organizations, non-governmental organizations and holders of and experts in traditional knowledge, should be encouraged to draw the attention of actors defined in section C. 3. States and the Secretariat to any of the above reasons for modifying existing EBSA descriptions and to support States if appropriate in to facilitate the preparation of modification proposals, if appropriate, and provide suggestions for modification. [(Rationale: Secretariat is not an actor.)]

D. Modalities Options to initiate the for modification process

4. **The modalities for modifying an existing EBSA would be the following** ~~re are options, which could be complementary, for the procedure to initiate the modification process:~~

Step 1: The Secretariat collects the proposals for modifications made by the actors.

Step 2: The proposals are passed on to the informal advisory group (IAG), which advises the Executive Secretary on the further process for modification of EBSAs, the terms of reference for IAG providing the framework, e.g. timeline and required number of proposals, for triggering the IAG advice:

Option 1. **Significant modification: CBD workshop to be held according to the CBD standards and subsequent feeding of the workshop outcomes into SBSTTA and COP. Submission of specific modification proposals (case-by case basis) to the Secretariat at any time. [(Rationale: Moved to C.)]**

Option 2. **Minor modification: Informal advisory group decides on modifications and subsequently feeds the information into SBSTTA and COP. Periodic**

~~regional workshops (timeframe agreed upon by the Conference of the Parties).~~

[(Comment: Criteria to differentiate between minor and significant modifications still have to be developed by IAG.)]

~~Option 3. Submission of modification proposals to the Secretariat until a defined number of proposals have been received or a specific time period has elapsed since the submission of the proposal, at which time the Secretariat would convene a workshop, in consultation with the informal advisory group.~~

~~Option 4. A regional advisory group (once established) would determine when a workshop would be convened to consider possible modifications.~~

5. — There are options for the differentiation between a significant modification and a minor modification to existing EBSAs, as follows:

Option 1. All modifications must go through the current CBD process.

Option 2. Proposals for modification will be sorted into two classes, one of which will go through a simpler process. Modifications that will go through a simpler process can be determined by:

(a) — Pre-identified criteria;

(b) — An expert advisory group of the CBD (e.g. Informal Advisory Group on EBSAs);

(c) — A regional group mandated to do this task.

For option 2, a clear definition is necessary to determine what is deemed a significant vs. minor change that may trigger modification or that may require different CBD processes.

E. Options to complement existing regional workshops

6. — The following could complement existing regional workshops:

(a) — Submission(s), by States or competent intergovernmental organizations, of proposals for modification of existing EBSA descriptions to, and collation by, the Secretariat of the Convention on Biological Diversity;

(b) — Regular (e.g., annual or biennial for the cycle of the Subsidiary Body on Scientific, Technical and Technological Advice/Conference of the Parties) progress report on submissions made available through the information-sharing mechanism or other means;

(c) — Proposals for modifications to be reviewed by a regional network of experts and other advisers, as appropriate, (to be established through relevant regional organizations) or CBD informal advisory group on EBSAs, which may recommend that a regional or other type of workshop be convened sooner than the periodic regional workshops. Regional networks should engage various stakeholders, including regional and sectoral intergovernmental bodies, non-governmental organizations, private sector and indigenous peoples and local communities. **[(Rationale: Taken up in new para. 4 above to make the process more transparent and stringent.)]**

F. Key considerations for modifications

7. Parties and other Governments, as well as relevant organizations, should be informed of any submission of proposals for the modification of existing EBSA descriptions through a CBD notification, the CBD website, the EBSA information-sharing mechanism, and the websites of CBD partner organizations and/or other means.

8. The following considerations need to be taken into account:

(a) The importance of incorporating traditional knowledge in the process of modification of existing EBSA descriptions and ensuring the full and effective participation of indigenous peoples and local communities;

(b) Options for enhancing the incorporation of traditional knowledge may also include revision of the EBSA description template to include a section with a list of all consulted organizations and specifically a subsection on consultations regarding traditional knowledge;

(c) The need for a strong scientific and technical basis for any proposed modification;

(d) The importance of transparency in the modification process; the opportunity to use cost-effective modalities, including web-based communication;

(e) [The need to accompany modifications caused by changes to the ecological or biological features of EBSA(s) with guidelines for monitoring the concerned EBSA(s) and implications for threats and effectiveness of management measures currently or potentially in use to support national efforts to restore the original ecological or biological value of the areas that had met the EBSA criteria;

(f) The opportunity to introduce the category of “EBSA at Risk”, learning from the example of the Ramsar Convention;] **[(Rationale: Some participants from the Vilm meeting felt, that these paragraphs go beyond the scope of EBSAs, i.e. management implications.)]**

(g) The need to keep information about any previously described EBSA within the repository in case of modification/deletion of the EBSA from the list.

G. Capacity-building needs for the modification of existing EBSAs

[(Comment: The participants of the Vilm meeting suggest to add an additional section in the Annex covering the issue of Capacity-building needs within the framework of EBSAs separately, merging this section (I G.) and section II D (Capacity-building need for description of new EBSAs).)]

9. Capacity-building needs with regard to the modification of existing EBSAs include:

(a) Peer review of modification proposals on the basis of the EBSA criteria;

(b) Use of scientific and technical information, including traditional knowledge, to modify an EBSA description;

(c) Awareness and understanding of the EBSA process.

II. DESCRIPTION OF NEW AREAS MEETING THE EBSA CRITERIA

A. Actors that can propose description of new areas meeting the EBSA criteria

10. Options for actors that can initiate the description of new areas meeting the EBSA criteria include:

(a) Areas beyond national jurisdiction: State(s), competent intergovernmental organizations, also taking into account future developments in the United Nations General Assembly process on biodiversity in areas beyond national jurisdiction;

(b) Areas within national jurisdiction: relevant States;

(c) [Regional scale: a regional network of experts can decide if newly available information is sufficient to justify the organization of another regional workshop, based on regular periodic review;

(d) Hybrid of time-based and new information-based trigger: regional experts decide if newly available information would warrant a regional workshop to be held sooner;] **[(Rationale: Some participants of the Vilm meeting are of the opinion that these matters might touch upon the sovereignty of States and it is unclear who the actors are.)]**

(e) Informal advisory group on EBSAs (as described in decision XIII/12, annex III) can advise the Secretariat of the Convention on Biological Diversity when a new workshop is needed;

(f) Knowledge holders, including scientific research organizations, non-governmental organizations and holders of/experts in traditional knowledge, should be encouraged to draw the attention of States and the Secretariat to any of the needs/reasons to facilitate the preparation of proposals for the description of a new EBSA, if appropriate.

B. Options to undertake the description of new EBSAs

11. Options for the description of new areas include:

~~(a) Regional workshops can continue, complemented by a virtual workshop, and supported by a continuous ongoing process of submission to the Secretariat of proposals on potential new areas meeting the EBSA criteria; [(Rationale: The regional workshops should not be in an automatic continuous manner.)]~~

~~(ab) New information can be submitted (using the template format) at any time to the Secretariat, which forwards it to and reviewed by a regional network of experts, and/or by the informal advisory group on EBSAs, to advise decide if a new review or workshop is needed. Such a review can focus on a specific element (such as specific species), and multiple sources of new submitted information can be combined to describe new areas meeting the EBSA criteria;~~

(b) A scientific gap analysis should be undertaken to support the prioritization for new regional/subregional/interregional workshops and/or thematic workshops, which can be reviewed and considered by the Subsidiary Body on Scientific, Technical and Technological Advice; [(Rationale: Change of order.)]

(c) Any information to be published on the CBD website should be fully reviewed by the informal advisory group on EBSAs, in view of potential sensitivities associated with public visibility;

(d) Workshops can be regional, subregional or interregional (global), or thematic;

~~(e) Workshops can both modify existing areas and describe new areas on the basis of submissions; [(Rationale: This section is particularly on new EBSA identification.)]~~

~~(f) A scientific gap analysis should be undertaken to support the prioritization for new regional/subregional/interregional workshops and/or thematic workshops, which can be reviewed and considered by the Subsidiary Body on Scientific, Technical and Technological Advice.~~

C. Key considerations for the description of new EBSAs

abridged; continued

D. Capacity-building needs for the description of new EBSAs

13. Capacity-building needs identified for the modification of existing EBSAs also apply to the description of new areas meeting the EBSA criteria, as follows:

(a) Understanding what constitutes an EBSA;

(b) How to develop a proposal, conduct a peer review, evaluate changes, and fill gaps in scientific data, data collection, etc.;

(c) How holders of and experts in traditional knowledge can participate in these processes and how scientists can engage with them;

(d) [How to use EBSA information for management;] [(Rationale: Some Vilm participants felt that this goes beyond the scope of EBSAs and does not fit the heading. Note: Create separate section on capacity-building.)]

(e) Understanding of different types of processes, including the links between the EBSA process and other processes, sectors, activities and stakeholders.

III. OPTIONS FOR STRENGTHENING THE SCIENTIFIC CREDIBILITY AND TRANSPARENCY OF THE EBSA PROCESS

A. Scientific credibility of the ~~regional workshops on EBSAs~~ process

abridged; continued

B. Transparency of the ~~regional workshops on EBSAs~~ process

16. With regard to strengthening the transparency of ~~regional workshops~~ the EBSA process, the following steps could be taken:

abridged; continued

17. There is a need to enhance the understanding of the EBSA process, with a view to contributing to its transparency, through the following steps:

(a) Conveying the relevance of EBSA descriptions to different sectors and the broader scientific community in understandable language;

(b) Improving ~~Increasing~~ media coverage ~~engagement~~ at the national and regional levels ~~during/at the end of regional workshops~~ (on the basis of experience accrued by the Secretariat of the Convention on Biological Diversity in the context of other CBD expert meetings);

(c) Considering the use of EBSA descriptions in support of national and regional marine spatial planning or other initiatives for achieving the Aichi Biodiversity Targets and the Sustainable Development Goals.

abridged; continued

C. Enhanced peer-review in the EBSA process

19. Peer-review options should be implemented in a manner and timing that allows experts to respond to peer-review comments to potentially incorporate changes and strengthen the description. With regard to strengthening the peer-review process, the following options could be considered:

Option 1: Developing global and regional rosters of additional peer-reviewers (including traditional knowledge holders and experts), to be selected when needed by the informal advisory group on EBSAs, with the Secretariat of the Convention on Biological Diversity liaising with relevant regional organizations to identify regional expertise in a geographically and thematically balanced way; providing training opportunities to reviewers included in the roster on the application of the EBSA criteria;

Option 2: Including members of the informal advisory group among regional workshop participants to ensure consistency across workshops;

Option 3: Adding an external review committee to review the reports after regional workshops, with a view to providing feedback for consideration at the next workshop;

Option 4: Involving competent international bodies for peer-review in the case of EBSAs that partly or entirely concern areas beyond national jurisdiction.

D. Thematic workshops

[(Comment: The Vilm participants suggest to add a new section at the beginning of the annex that describes the different options of potential workshops, such as regional, subregional, interregional (global), or thematic. The rest of the annex would then only refer to “workshop” for which details would be specified in the added workshop section.)]

abridged; continued

21. There is a need to ensure that participants in thematic workshops have the appropriate expertise **in accordance with standard CBD procedure**, and the following steps could be taken by the Secretariat of the Convention on Biological Diversity:

abridged; continued

E. National exercises

abridged; continued

25. In the light of the need to clarify the distinction between including the results of national processes in the information-sharing mechanism or **including them into** the global EBSA repository, the options for submission of national exercises to the Secretariat of the Convention on Biological Diversity could include:

abridged

8 Biodiversity and Climate Change: Ecosystem-Based Approaches to Climate Change Adaptation and Disaster Risk Reduction

Item 9 of the provisional agenda

Item 9 was introduced to the plenary of the Vilnius meeting by Hugo René Rivera Mendoza. The participants at the Vilnius meeting took note of the document UNEP/CBD/SBSTTA/22/8 and discussed the item. The results of the discussion are mirrored in the following changes in the document's suggested recommendations.

Document UNEP/CBD/SBSTTA/22/8:

Suggestions on the text:

BIODIVERSITY AND CLIMATE CHANGE: ECOSYSTEM-BASED APPROACHES TO CLIMATE CHANGE ADAPTATION AND DISASTER RISK REDUCTION

Note by the Executive Secretary

INTRODUCTION

abridged; continued

IV. SUGGESTED RECOMMENDATIONS

2. The Subsidiary Body on Scientific, Technical and Technological Advice may wish to recommend that the Conference of the Parties at its fourteenth meeting adopt a decision along the following lines:

The Conference of the Parties

Deeply concerned that even at 2°C, climate change would place many species and ecosystems with limited adaptive capacity and life supporting processes under very high risk, recognizes that keeping global temperature increases closer to 1.5°C rather than 2°C, is likely to significantly reduce the negative impacts on biodiversity, especially in the most vulnerable ecosystems. [(Rationale: Partially taken from CBD/SBSTTA-22/08, section III, para 25; the IPCC report will be published and available for COP 14.)]

1. *Adopts* the voluntary guidelines for the design and effective implementation of ecosystem-based approaches to climate change adaptation and disaster risk reduction, contained in the annex to the present decision;

2. *Encourages* Parties, other Governments and relevant organizations to make use of the voluntary guidelines when designing and implementing ecosystem-based approaches to climate change adaptation and disaster risk reduction;

3. *Encourages* Parties, pursuant to decisions [IX/16](#), [X/33](#), [and XIII/4](#) and [XIII/5](#), to further strengthen their efforts:

- (a) To identify regions, ecosystems and components of biodiversity that are vulnerable to climate change, and assess the threats and impacts of climate change;
- (b) To integrate climate change concerns into national biodiversity strategies and action plans **and vice versa; [(Rationale: Biodiversity concerns should also be included into climate change mitigation and adaptation strategies and action plans.)]**
- (c) To promote **and implement EbA, eco-DRR and** ecosystem restoration;
- (d) To take appropriate actions to address and reduce the impacts of climate change and climate change mitigation and adaptation activities, on biodiversity and biodiversity-based livelihoods;
- (e) To monitor the impacts of climate change on biodiversity and biodiversity-based livelihoods;
- (f) To include information on their efforts in this regard in their reports to the Convention;

3bis. Endorses the key messages of the IPBES Land Degradation and Restoration Assessment supporting ecosystem-based adaptation and mitigation; [(Rationale: The outcome of the LDRA is highly relevant in the context of EbA and eco-DRR.)]

3ter. Encourages Parties when updating their Nationally Determined Contributions to take into account the importance of ensuring the integrity of all ecosystems, including oceans, and the protection of biodiversity, and to integrate ecosystem-based approaches into their updated Nationally Determined Contributions. [(Rationale: At COP-24 in December 2018, Parties to the UNFCCC will take stock of progress towards the long-term goals, informing the preparations of the next round of NDCs. This recommendation should encourage the uptake of biodiversity in climate change policy.)]

3quarter. Encourages Parties to collaborate on the conservation, restoration and wise/sustainable use of wetlands, in order to recognize their importance in the context of climate change and disaster risk reduction and to support the initiative for a joint declaration on the collaboration on peatland conservation, restoration and wise use in the context of climate change and disaster risk reduction among relevant multilateral environmental agreements. [(Rationale: Exact wording depending on the results of the Ramsar COP-13.)]

4. *Invites* Parties to provide, on a voluntary basis, information on their activities and results from the implementation of the voluntary guidelines for the design and effective implementation of ecosystem-based approaches to climate change adaptation and disaster risk reduction, to be made available through the clearing-house mechanism;

5. *Invites* the Friends of Ecosystem-based Adaptation and the Partnership for Environment and Disaster Risk Reduction, and their respective members, to continue to support Parties in their efforts to promote ecosystem-based approaches to climate change adaptation and disaster risk reduction;

6. *Requests* the Executive Secretary, subject to the availability of resources, to support the efforts of Parties in making use of the voluntary guidelines for the design and effective implementation of ecosystem-based approaches to climate change adaptation and disaster risk reduction by, among other things:

- (a) Enabling capacity-building and supporting the use of tools in collaboration with relevant partners and initiatives;
- (b) Updating, as necessary, the information on guidance, tools and initiatives available in the voluntary guidelines for the design and effective implementation of ecosystem-based approaches to climate change adaptation and disaster risk reduction,¹ making it available through the clearing-house mechanism;

¹ CBD/SBSTTA/22/INF/1.

7. *Also requests* the Executive Secretary to **take into account** ~~review~~ the findings of the special report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty published by the Intergovernmental Panel on Climate Change, in order to identify the potential implications for the work of the Convention for consideration by the Subsidiary Body on Scientific, Technical and Technological Advice.

7bis. Acknowledging that climate change is predicted to grow as a driver of land use change and biodiversity loss, and that biodiversity particularly ecosystems play a key role in climate change mitigation and adaptation, requests the Executive Secretary to address the biodiversity-climate nexus in the preparation for the post-2020 global biodiversity framework. [(Rationale: Partially taken from the CBD/SBSTTA/22/8, Section II A, para 13; Biodiversity and ecosystems play a key role in climate change mitigation and adaptation (more than 1/3 (37%) as demonstrated by recent findings, such as Griscom *et al.* 2017).)]

Annex

VOLUNTARY GUIDELINES FOR THE DESIGN AND EFFECTIVE IMPLEMENTATION OF ECOSYSTEM-BASED APPROACHES TO CLIMATE CHANGE ADAPTATION AND DISASTER RISK REDUCTION

1. Introduction

abridged; continued

1.1. What are ecosystem-based approaches to climate change adaptation and disaster risk reduction?

abridged; continued

6. ~~In order for climate change adaptation and disaster risk reduction activities to be recognized as EbA and Eco-DRR~~ **have**, ~~they must encapsulate~~ the following characteristics:

- (a) Enhance **resistance and** resilience and reduce social and environmental vulnerabilities to current and future climate change impacts and disaster risk, contributing to incremental and transformative adaptation and disaster risk reduction;
- (b) Generate societal benefits, contributing to sustainable and resilient development using equitable, transparent and participatory approaches;
- (c) Make active use of biodiversity and ecosystem services through sustainably managing, conserving and restoring ecosystems;
- (d) Be part of overall strategies for adaptation and risk reduction that are supported by policies at multiple levels, and encourage equitable governance while enhancing capacity.

2. Principles and safeguards

7. The voluntary guidelines are underpinned by principles and safeguards that were developed by reviewing existing literature and guidelines on EbA and Eco-DRR² and complement other principles and

² Including “Guidance on Enhancing Positive and Minimizing Negative Impacts on Biodiversity of Climate Change Adaptation Activities” (UNEP/CBD/SBSTTA/20/INF/1).

guidelines³ adopted under the Convention or under other bodies. The safeguards are social and environmental measures to avoid unintended consequences of EbA and Eco-DRR to people, ecosystems and biodiversity; they also facilitate transparency in throughout all stages of planning and implementation, and promote the realization of benefits.

2.1. Principles

8. The principles serve as standards for guiding the planning and implementing process. They integrate elements of EbA and Eco-DRR practice and serve as high-level standards to guide planning and implementation. The principles are clustered into themes: building resilience and enhancing adaptive capacity, inclusivity and equity, consideration of multiple scales, and effectiveness and efficiency. The guidelines in section III provide suggested steps, methodologies and associated tools to implement actions on EbA and Eco-DRR according to the principles and safeguards.

Principles for building resilience and enhancing adaptive capacity through EbA and Eco-DRR

- 1 Consider a full range of ecosystem-based approaches to enhance resilience of social-ecological systems as a part of overall adaptation and disaster risk reduction strategies.
- 2 Use disaster response as an opportunity to build back better for enhancing adaptive capacity and resilience⁴ and integrate ecosystem considerations throughout all stages of disaster management.
- 3 Apply a precautionary approach⁵ in planning and implementing EbA and Eco-DRR interventions.

Principles for ensuring inclusivity and equity in planning and implementation

- 4 Prioritize and target EbA and Eco-DRR interventions to prevent and avoid the disproportionate impacts of climate change and disaster risk on vulnerable groups, indigenous peoples and local communities, and ecosystems.

Principles for achieving EbA and Eco-DRR on multiple scales

- 5 Design EbA and Eco-DRR interventions at the appropriate scales, recognizing that some EbA and Eco-DRR benefits are only apparent at larger temporal and spatial scales.
- 6 Ensure that EbA and Eco-DRR are sectorally cross-cutting and involve collaboration, coordination, and cooperation of stakeholders and rights holders.

Principles for EbA and Eco-DRR effectiveness and efficiency

- 7 Ensure that EbA and Eco-DRR interventions are evidenced-based, integrate indigenous and local knowledge where available, and are supported by the best available science, research, data, practical experience, and diverse knowledge systems.
- 8 Incorporate mechanisms that facilitate adaptive management and active learning into EbA and Eco-DRR, including continuous monitoring and evaluation at all stages of planning and implementation.
- 9 Identify and assess limitations and minimize potential trade-offs of EbA and Eco-DRR interventions.
- 10 Maximize synergies in achieving multiple benefits, including for biodiversity, conservation, sustainable development, gender equality, **health**, adaptation, and risk reduction.

abridged; continued

³ See Ecosystem restoration: short term action plan (decision [XIII/5](#)); [the United Nations Declaration on the Rights of Indigenous Peoples](#); and Principles, Guidelines and Other Tools Developed under the Convention, available at <https://www.cbd.int/guidelines/>.

⁴ The use of the recovery, rehabilitation and reconstruction phases after a disaster to increase the resilience of nations and communities through integrating disaster risk reduction measures into the restoration of physical infrastructure and societal systems, and into the revitalization of livelihoods, economies and the environment ([UNISDR definition of “build back better”](#), 2017, as recommended by the open-ended intergovernmental expert working group on terminology relating to disaster risk reduction ([A/71/644A/71/644](#) and Corr.1) and endorsed by the United Nations General Assembly (see [resolution 71/276](#))).

⁵ The precautionary approach is stated in the preamble of the Convention on Biological Diversity: “Where there is a threat of significant reduction or loss of biological diversity, lack of full scientific certainty should not be used as a reason for postponing measures to avoid or minimize such a threat.”

3. Overarching considerations for EbA and eco-DRR design and implementation

abridged; continued

3.1. Mainstreaming EbA and Eco-DRR

Purpose

abridged; continued

16. If all three aspects come together in favourable ways, there is a “momentum” for policy change. In cases of disaster, there is generally openness towards stakeholders’ needs, innovative tools and approaches, joint searches for best available solutions, and a willingness to invest and (re)build better. These are important opportunities to include EbA or Eco-DRR aspects. Entry points may occur at all levels of government, and can imply different levels of governance, **and/or** collaboration with the private sector.

17. In general, entry points for mainstreaming may be found in:

(a) The development or revision of policies and plans, e.g. development or sectoral plans, nationally determined contributions, national adaptation plans, national biodiversity strategies and action plans, strategic environmental assessments, land-use plans;

(b) Command and control instruments, e.g. climate change and environmental laws, standards, and environmental impact assessments;

(c) Economic and fiscal instruments, e.g. investment programmes, funds, **subsidies**, taxes, fees;

(d) Educational and awareness-raising measures, e.g. environmental education, extension programmes, technical careers and university curricula;

(e) Voluntary measures, e.g. environmental agreements with private landowners, or the definition of standards.

abridged; continued

4. Stepwise approach to design and implementation of effective EbA and Eco-DRR

23. In developing a conceptual framework for these guidelines, various climate change adaptation and disaster risk reduction processes were considered, in addition to broader problem-solving approaches such as the landscape and systems approach frameworks.^{6,7} These guidelines **are intended for use by Parties, other governments and relevant organizations. They** employ a broad perspective on all ecosystems and include considerations for mainstreaming EbA and Eco-DRR. The guidelines integrate these approaches within a series of iterative steps. The process is intended to be flexible and adaptable to

⁶ Including: National adaptation plans (UNFCCC), Operational Framework for EbA (WWF), Adaptation mainstreaming cycle (GIZ), Disaster risk management cycle (European Environmental Agency), Eco-DRR cycle (Sudmeier-Rieux 2013), Ecosystems protecting infrastructure and communities (IUCN, Monty et al. 2017), and the Landscape Approach (CARE Netherlands and Wetlands International).

⁷ Additional details are provided in CBD/SBSTTA/22/INF/1.

the needs of a project, programme or country, region, or landscape/seascape. The principles and safeguards for EbA and Eco-DRR are central to the planning and implementation process, and the overarching considerations are provided to improve effectiveness and efficiencies. Steps are linked to a toolbox providing a non-exhaustive selection of further guidance and tools available as supplementary information.⁸ Stakeholder engagement, mainstreaming, capacity-building, and monitoring should be conducted throughout the process.

Step A. Understanding the social-ecological system

abridged; continued

Box 2. Stakeholder and rights-holder analysis and establishment of participatory mechanisms

An assessment of the system or landscape helps to analyse the problem, define the boundaries for climate change adaptation and disaster risk reduction interventions, and screen for entry points for EbA and Eco-DRR. This information should feed into an in-depth stakeholder analysis before engaging stakeholders throughout the adaptation/DRR process, and also iteratively benefits from information from stakeholders. Prior and informed engagement of stakeholders and rights holders will increase ownership and likely success of any adaptation/DRR intervention. In-depth stakeholder analyses and development of multi-stakeholder processes and participatory mechanisms are key to meeting principles on equity and inclusivity and related safeguards. The Akwé: Kon Voluntary Guidelines (<https://www.cbd.int/traditional/guidelines.shtml>) outline procedural considerations for the conduct of cultural, environmental and social impact assessments, which are widely applicable to EbA and Eco-DRR.

Key Actions

- Identify indigenous peoples and local communities, stakeholders and rights holders likely to be affected by EbA and Eco-DRR interventions, and identify people, organizations and sectors that have influence over planning and implementation, using transparent participatory processes.
- Ensure full and effective participation of all relevant stakeholders and rights holders, including the poor, women, youth and the elderly, ensuring they have the capacity and sufficient human, technical, financial and legal resources to do so (in line with the safeguards).
- Engage with civil society organizations and/or community-based organizations to enable their effective participation.
- Where appropriate, identify and protect the ownership and access rights to areas for the use of biological resources.

[(Comment on Box 2: The participants of the Vilm meeting found the wording in line 4 f. confusing. Some participants would support deleting “Prior and informed”, as “engagement” is not “consent” (where it is common to use free, prior and informed consent). Some participants suggested to change the wording into “Timely engagement...” to include the time component.)]

Step B. Assessing vulnerabilities and risks

Purpose

26. Vulnerability and risk assessments are undertaken to identify the main climate change and disaster risks and impacts on the social-ecological system of interest, for example, taking stock of biodiversity and ecosystem service information to identify species or ecosystems that are particularly vulnerable to the negative impacts of climate change. The assessments are then used to identify, appraise and select targeted adaptation and disaster risk reduction interventions in planning and design. Risk and vulnerability assessments also aid in allocating resources to where they are most needed, and establishing baselines for monitoring the success of interventions.

⁸ CBD/SBSTTA/22/INF/1.

27. Vulnerability describes the degree to which a natural or social system is susceptible to, and unable to cope with, adverse effects of climate change.⁹ Vulnerability, exposure and hazards together determine the risks of climate-related impacts (figure 3). The overarching framework of the Intergovernmental Panel on Climate Change since the fifth assessment report is managing current and future climate risks principally through adaptation **[(Comment: Check whether this statement is correct in stating “principally by adaptation” or whether it should actually read “increasingly by adaptation”. The participants wondered whether the mitigation aspect is left out (see figure 3). If it is a direct quote of the IPCC, it should be properly quoted.)]**, but also through disaster risk reduction, resilience and sustainable development informed by an understanding of the risk. Thus, the concept of risk reduction is central to adapting to current and future climate risks and disasters. While they have different definitions and underlying assumptions, both risk and vulnerability assessments follow a similar logic.

abridged; continued

Step C. Identifying EbA and Eco-DRR options [(Comment: Why not have “strategies and options” as well in the heading?)]

Purpose

31. Having defined the boundaries of the social-ecological system/landscape and identified initial entry points for EbA and Eco-DRR, as well as vulnerabilities and risks (Step A), potential options are identified by the multi-stakeholder group within an overall strategy of adaptation and disaster risk reduction. A list of relevant tools linked to this step is provided in the Step C Toolbox: Identifying EbA and Eco-DRR Strategies **[(Comment: Why not “strategies and options”?)]**, available as supplementary information.¹⁰

abridged; continued

Step D. Prioritizing, appraising and selecting EbA and Eco-DRR options

abridged; continued

Key actions

abridged; continued

(i) In appraising options, consider the costs and benefits of interventions over the long term, as the time period in economic comparison of various options is important, and consider both upfront capital and longer-term maintenance costs. For example, engineered structures, such as dykes, can be relatively inexpensive at the investment level but carry high maintenance costs, whereas ecosystem-based approaches, such as wetland restoration, may be less expensive in the long term **and provide multiple benefits**;

abridged; continued

⁹ Intergovernmental Panel on Climate Change, *Fourth Assessment Report*, 2007.

¹⁰ Available in CBD/SBSTTA/22/INF/1.

Box 3. Evaluating trade-offs and limitations

Part of the process of prioritizing, appraising and selecting adaptation/DRR options involves the identification and evaluation of potential trade-offs. Trade-offs may arise when an activity protects one group of people at the expense of another, or favours a particular ecosystem service over another. Some trade-offs are the result of deliberate decisions; others occur without knowledge or awareness. For example, the implementation of adaptation actions upstream may have effects on downstream communities, and at different times. Ecosystems are subject to climate change, and, therefore, EbA, Eco-DRR and other practices that use ecosystem-based approaches should be designed to be robust in the face of current and projected impacts of climate change. Trade-offs and limitations should be considered and integrated within overall adaptation and disaster risk reduction planning and aligned with national policies and strategies. They should also be implemented alongside other measures of risk reduction, including avoidance of high-risk zones, improved building codes, early warning and evacuation procedures. A trade-off analysis across scales and considering multiple benefits can help to **favour place**-EbA and Eco-DRR options ~~on equal footing alongside other options.~~

Key actions

- Develop indicators of short- and long-term changes across various spatial scales to detect potential trade-offs and limitations of EbA and Eco-DRR (see Step F for more detail).
- Use geospatial data and models (such as those available in InVEST) to understand how changes in ecosystem structure and function as a result of adaptation or DRR interventions will affect ecosystem services across a land- or seascape.
- Consider the full range of infrastructure options from “green” to “hybrid” to “hard” and their compatibility, recognizing that different combinations are needed in different situations.
- Ensure that EbA and Eco-DRR are informed by the best available science and indigenous and traditional knowledge to fully account for possible trade-offs and limitations.
- Ensure the integration of EbA and Eco-DRR into overall adaptation or disaster risk reduction strategies, in recognition of **the multiple benefits and** potential limitations of ecosystem-based approaches.
- **Maximize multiple benefits and c**onsider and minimize trade-offs or unintended consequences of EbA and Eco-DRR throughout all stages of planning and implementation, including accounting for uncertainties in climate projections and for different scenarios.

[(Comment: In box 3, the terms “green”, “hybrid” and “grey”/“hard” infrastructure should be explained (reference to glossary in the Technical Series document).)]

Step E. Project design and implementation

abridged; continued

Key actions

abridged; continued

- (j) Consider principles for building resilience in social-ecological systems (see box 5). **[(Comment: The heading of Box 5 reads “Apply resilience thinking”; in order to be consistent the participants of the Vilnius meeting recommend using the same phrasing here.)]**

abridged

9 Invasive Alien Species

Item 10 of the provisional agenda

Item 10 was introduced to the plenary of the Vilm meeting by Karin Zaunberger. The participants at the Vilm meeting took note of the document UNEP/CBD/SBSTTA/22/9 and discussed the item. The results of the discussion are mirrored in the following changes in the document's suggested recommendations.

Document UNEP/CBD/SBSTTA/22/9:

Suggestions on the text:

INVASIVE ALIEN SPECIES

Note by the Executive Secretary

BACKGROUND

abridged; continued

V. SUGGESTED RECOMMENDATIONS

18. The Subsidiary Body on Scientific, Technical and Technological Advice may wish to recommend that the Conference of the Parties adopt a decision along the following lines:

The Conference of the Parties

Welcomes the upcoming IPBES thematic assessment on invasive alien species and their control; [(Rationale: fostering synergy)]

1. ~~[Adopts/welcomes]~~ the **voluntary supplementary** ~~supplemental~~ guidance as annexed to the present decision;

2. *Invites* Parties, other Governments and relevant organizations to apply the guidance;

3. ~~*Decides to establish an ad hoc technical expert group on invasive alien species, subject to the availability of financial resources, to convene a meeting of this group in accordance with the terms of reference contained in the annex;*~~ **[(Rationale: The participants of the Vilm meeting feel that an open on line forum is the more appropriate tool to address the issues listed.)]**

4. *Encourages* Parties and *invites* other Governments to share information on national **and regional** import regulations relevant to invasive alien species **and lists of invasive alien species [(Rationale: Additional specific information)]** through the clearing-house mechanism or other **appropriate** ~~equivalent~~ means;

5. *Requests* the Executive Secretary **pending availability of resources:**

(a) ~~to explore with the Secretariat of the United Nations Economic and Social Council, the~~ **World Customs Organization [(Rationale: Adding an important player)]** as well as the Inter-agency Liaison Group on Invasive Alien Species the possibility of developing a globally harmonized system of classification [and labeling] **[(Comment: Suggested for deletion by some participants of the Vilm meeting)]** for biodiversity hazards **related to invasive alien species [(Rationale: Adding clarity)]**, and

report on its progress to the Subsidiary Body on Scientific, Technical and Technological Advice at a meeting to be held prior to the fifteenth meeting of the Conference of the Parties;

(b) to convene a moderated open online forum to submit and discuss methods for cost-benefit and cost-effectiveness analysis which best apply to the management of invasive alien species and methods, tools and measures for identification and minimization of risks posed by trade of invasive alien species via e-commerce;

(c) to prepare a compilation and synthesis of the submissions and discussions of the online forum and to report to the Subsidiary Body on Scientific, Technical and Technological Advice at a meeting to be held prior to the fifteenth meeting of the Conference of the Parties.

Annex I

Draft supplementary guidance for avoiding unintentional introductions of invasive alien species associated with trade in live alien species

1. The present guidance supplements the Guidance on Devising and Implementing Measures to Address the Risks Associated with the Introduction of Alien Species as Pets, Aquarium and Terrarium Species, and as Live Bait and Live Food annexed to decision [XII/16](#).
2. The purpose of this guidance is to **minimise prevent** **[(Rationale: CBD language)]** the risk of biological invasion of alien organisms crossing the borders of national jurisdiction and distinct biogeographic areas through the unintentional introduction pathways described in the CBD pathway categorization in association with trade in live species.^{6,7}
3. This guidance is relevant to States, relevant organizations, industry and consumers, including all actors involved in the entire value chain of trade in live species (e.g. exporters, importers, breeders, including amateur collectors, participants of exhibitions, and wholesalers, retailers and customers). For the case of live food trade, the persons involved in the value chain include individuals in the business of restaurants and food markets.

I. SCOPE

4. This guidance is voluntary and intended to be used in conjunction with, and be mutually supportive to, other relevant guidance, for example: the Guiding Principles for the Prevention, Introduction and Mitigation of Impacts of Alien Species that Threaten Ecosystems, Habitats and Species (decision VI/23);¹ the International Standards for Phytosanitary Measures (ISPMs); the Terrestrial Animal Health Code and the Manual of Diagnostic Test and Vaccines for Terrestrial Animals of the World Organisation for Animal Health (OIE); the OIE Aquatic Animal Health Code and the Manual of Diagnostic Tests for Aquatic Animals and other standards and guidance developed by relevant international organizations.
5. This guidance also describes integrated processes for its implementation together with the guidance annexed to decision [XII/16](#) and existing international standards set for the protection of **biodiversity and** **[(Rationale: Widening the scope, CBD relevance)]** the health of animals, plants and humans.
6. This guidance can be implemented by Parties and other Governments with cross-sectoral collaboration among conservation authorities, border control authorities, and risk regulatory bodies relevant to international trade as well as relevant industries and consumers who are involved in the value chain of trade in live species.

¹ One representative of a Party entered a formal objection during the process leading to the adoption of this decision and underlined that he did not believe that the Conference of the Parties could legitimately adopt a motion or a text with a formal objection in place. A few representatives expressed reservations regarding the procedure leading to the adoption of this decision (see UNEP/CBD/COP/6/20, paras. 294-324).

II. MEASURES TO REDUCE THE RISK OF ~~INVASIVE BIOLOGICAL INVASIONS POSED BY ALIEN SPECIES² ORGANISMS~~ MOVING UNINTENTIONALLY IN PATHWAYS ASSOCIATED WITH TRADE IN LIVE SPECIES

[Rationale: For consistency of language in accordance with the definition given in decision COP VI/23 footnote 57 (I); conformity of wording with COP XIII/13]

A. Conformity with existing international standards and other guidance relevant to invasive alien species

abridged; continued

B. Responsible preparation of consignments of live species

11. A sender/exporter of live species should be fully aware of the potential risks of biological invasions resulting from the movement of the alien ~~species organisms~~ **[(Rationale: Consistency of language)]** through unintentional pathways associated with trade in live species and should ensure: (a) that a consignment meets sanitary and phytosanitary requirements set by an importing country; and (b) **compliance with national and regional regulations dealing with invasive alien species and c) [(Rationale: Recognition of national and regional regulations)]** measures to minimize the risk of unintentional introductions are applied.

12. A sender/exporter of a consignment of live species shall inform the importer of the potential risks of biological invasion by alien ~~species~~ **organisms** on a label and/or a document attached to the consignment containing live species, addressed to the border control authorities, national plant protection organizations or veterinary authorities.] In some cases, this information should be presented to the competent authorities in the country or countries of transit, in order to allow the adoption of appropriate risk management measures during transit. **[(Comment: Participants of the Vilm meeting had differing views on the issue of labelling as appropriate and effective measure in this context. There was a suggestion to delete the whole paragraph or the bracketed part.)]**

13. A sender/exporter of live species should apply all appropriate sanitary and phytosanitary measures to ensure that the live species are shipped free of pests, pathogenic agents and alien ~~species organisms~~ which may carry risks of biological invasions in an importing country or biogeographic areas receiving them.

C. Packing containers/consignment

14. ~~Hazard labelling may be affixed to e~~Each consignment **should be appropriately labelled**, when applicable and appropriate, by a sender/exporter, considering the potential risk of biological invasions of alien ~~organisms moving through unintentional pathways~~, especially when the live species were captured or collected from the wild, to inform the persons involved in the entire value chain of the potential risks to biodiversity. **[(Rationale: More concise)]**

15. Packing material or containers associated with the movement of live species should be free of pests, pathogenic agents and invasive alien ~~species organisms~~ which are of concern to the importing country, **countries of transit** or biogeographic areas **concerned receiving them**. If the packing material is made from wood, appropriate treatment described in ISPM 15 (Regulation of wood packaging material in international trade) **as well as other national and regional regulations** should be applied. ~~Efforts should~~

² Referring to Decision VI/23, footnote 57 (i) the following definition is used: "alien species" refers to a species, subspecies or lower taxon, introduced outside its natural past or present distribution; includes any part, gametes, seeds, eggs, or propagules of such species that might survive and subsequently reproduce;

~~be made to ensure that the packing material and/or containers are free of invasive alien organisms.~~
[(Rationale: Duplication of first and second sentence)]

16. If a packing container is to be reused, it should be washed and disinfected by a sender/exporter prior to shipping and visually inspected prior to reusing.

17. Packing containers for aquatic species should be **[(Rationale: Covered under para. 12)]** ~~free of pests, pathogenic agents and invasive alien organisms which are of concern to an importing country or biogeographic areas receiving them, and~~ closed appropriately by a sender/exporter to prevent leaks of water(s) and/or contamination into or from the consignment during the transport of the entire value chain by the individuals handling the packing containers.

D. Materials associated within packing containers

18. A sender/exporter of live species should ensure that, prior to shipping, animal bedding is treated with appropriate method(s) to ensure that it is free of pests, pathogenic agents and invasive alien **species organisms** ~~which are of concern to an importing country, countries of transit or biogeographic areas concerned receiving them.~~

19. Water(s) for aquatic live species and any associated media to be used during transport should be free of pests, pathogenic agents and alien **species organisms** ~~which are of concern to an importing country or biogeographic areas receiving them and should be treated as required.~~

20. Air and air supplying devices associated with consignments of aquatic species should be free of pests, pathogenic agents and alien **species organisms** ~~which are of concern to an importing country or biogeographic areas receiving them.~~

21. Any soil or soil-related materials associated with the transport of live species should be eliminated by a sender/exporter prior to shipping. If soil or soil-related materials cannot be eliminated from the packing containers, the sender/exporter should consult the import regulations of the national plant protection organization of the importing country and comply with them.

E. Feed or food for live animals

22. A sender/exporter of live species should ensure that any feed or food contained in a consignment does not consist of viable seeds, parts of plants or animals that maintain the potential of establishment at the destination. Senders/exporters should ensure that the feed or food is free of pests, pathogenic agents and invasive alien **species organisms** ~~which are of concern to an importing country, countries of transit or biogeographic areas concerned receiving them.~~

F. Treatment of by-products, waste, waters and media

23. By-products and waste produced during the transport of live species should be removed from the consignment **and correctly treated or eliminated as soon as possible** on arrival in the receiving country. The recipient of the consignment should apply appropriate treatment, including disinfection,³ incineration, rendering, autoclaving, or other measures on packing containers, other associated materials, by-products and waste prior to their disposal **in order** to minimize the risks **posed by** ~~of biological invasions of invasive alien species organisms.~~

G. Condition of carrier conveyances

24. ~~If live species or a consignment of live species is~~ expected to be loaded or has been previously loaded, the owners and operators of the carrier conveyances should ensure that the conveyances are washed, disinfected or otherwise appropriately treated. The owners of carrier conveyances should take

³ Disinfection means the application, after thorough cleansing, of procedures intended to destroy the infectious or parasitic agents of animal diseases, including zoonoses; this applies to premises, vehicles and different objects which may have been directly or indirectly contaminated ([OIE Terrestrial Animal Health Code](#)).

responsible measures to apply the treatment immediately upon the arrival of a carrier conveyance at a destination and maintain the treated condition until the next use.

25. Prior to an operation, a carrier conveyance should be inspected to determine its sanitary and phytosanitary condition to ensure that unintentional introduction of pests, pathogenic agents and invasive alien **species** ~~organisms~~ is minimized.

26. In the event of escape of live species, accidental spillage or leaks from a consignment, the owner and operators of the carrier conveyance should take necessary measures to recapture and contain the live species and alien **species** ~~organisms~~ attached to them. The owners and operators of carrier conveyances should wash the carrier conveyance and disinfect or treat it appropriately, and inform relevant national authorities in the affected country (country of transit or destination) about the nature of the escape, spillage or leak and the measures taken by the owners or operators of the carrier conveyance.

H. Role of States and national authorities in relation to invasive alien species

27. **It is recommended to collect and maintain relevant** ~~States that receive live species should keep~~ records of ~~all~~ consignments containing live species, **imported to a country** with regard to information on exporters, importers, taxa of commodity at the species level or possibly the lowest known taxonomic rank, and the health status of the animal and the phytosanitary conditions of the plant.

28. States should apply appropriate national border risk management measures in accordance with existing international guidance to minimize the risk of unintentional introduction of invasive alien **species** ~~organisms~~ **associated with trade in live species**.

29. When invasive alien **species** ~~organisms~~ unintentionally enter or become established, relevant **authorities** ~~offices, including conservation authorities,~~ should be notified, including, as appropriate, **environmental authorities**, the veterinary authority/competent authority and the national plant protection organization, to ensure that the exporting or re-exporting country, **neighbouring countries and countries of transit are** ~~is~~ informed of the event in order to prevent the further spread of the invasive alien species.

30. States, in collaboration with relevant organizations, should make information **freely** available to the public on: (a) import requirements for trade in live species **and other relevant national and regional regulations and policies related to invasive alien species** ~~designed to prevent the unintentional introduction of alien organisms associated with trade in live species;~~ (b) ~~the presence of an invasive alien species as a result of unintentional introduction;~~ and **(be)** results of pathway risk analysis, if they have been undertaken.

I. Communication, education and public awareness

[Rationale: To allow to include additional actors for awareness raising)]

31. States, **subnational governments and relevant organisations and industry involved in trade of that receive** live species should raise awareness **on** ~~of the risk of biological invasions posed by trade in live species, including unintentional introduction of pests, pathogenic agents and invasive alien~~ **species associated with the trade in live species** ~~organisms to persons involved in the entire value chain. This includes awareness-raising campaigns~~ **on exemplary cases of invasive alien species resulting from unintentional introduction** directed at the public, ~~and potential operators (amateur breeders, etc.)~~ **and persons involved in the entire value chain**. Such campaigns can be organized by States, subnational governments, relevant organizations or any industry involved in the value chain.

II. Monitoring

32. States should conduct monitoring of invasive alien **species** ~~organisms~~ which can unintentionally arrive in their territories, particularly in susceptible areas (e.g. ports, cross-docking and warehousing facilities, off-dock container yards, connected roads and railways) where their entry, establishment and early stage of spreading may occur.

33. When unintentional introduction in susceptible areas is observed, States should intensify the monitoring of invasive alien **species** ~~organisms~~ in nearby areas where there are concerns about protecting biodiversity, and **carry out** rapid responses to contain, control and eradicate the invasive alien **species** ~~organisms~~ should be taken. ~~Where information is available, efforts should be made to communicate this to~~

the public, including countries concerned about unintentional introduction. **[(Rationale: Covered under D)]**

34. States should monitor in-country movement and spread of invasive alien **species** ~~organisms~~ introduced unintentionally with the import of live species in collaboration with subnational or local authorities in order to minimize the impact of invasive alien species and their spread.

K.J. Other measures

35. Any national risk management measures regarding unintentional introduction pathways in exporting and importing countries, and codes of conduct set by international bodies related to shipping and delivery services, may apply within the scope of this **voluntary supplementary** ~~supplemental~~ guidance.

36. The risk of unintentionally introducing invasive alien species as contaminants in or on the container, as food or feed should be considered in the risk assessment of a species intended to be imported for use as a pets, aquarium and terrarium species, or as live bait and live food.

Glossary of terms used in the Supplementary Guidance			
Term	Explanation	Source	Link
Animal	Animal means any species, subspecies or lower taxon of the kingdom animalia with the exception of pathogens.	OIE Guidelines for assessing the risks of animals becoming invasive	http://www.oie.int/doc/ged/D13931.PDF
Associated shipping materials	Associated shipping materials include: materials to maintain the health and welfare of the live animals and plants within packing containers for transport; and include animal bedding, media containing or supporting the live organism including water, soil, wood and other substrates, air, water for ingestion and food and feed and by-products or waste within the consignment.		
By-products	By-products or waste are materials within the consignment of live animals and plants that are not intended for use by people involved in the entire value chain.		
Commodity	Commodity is a type of plant, plant product, animal, animal product or other article being moved for trade or other purpose.	Definition of commodity based on FAO definition but with added text on animal, and animal products.	https://www.ippc.int/largefiles/adopted_ISPMs_previousversions/en/ISPM_05_2007_En_2007-07-26.pdf
Consignment	A quantity of plants, plant products and/or other articles being moved from one country to another and covered, when required, by a single phytosanitary certificate (a consignment may be composed of one or more commodities or lots).	Definition based on IPPC ISPM 5 definition	https://www.ippc.int/largefiles/adopted_ISPMs_previousversions/en/ISPM_05_2007_En_2007-07-26.pdf
Contaminant	<i>contaminants</i> mean organisms which have an opportunistic association with: live animals; live plants; packing container consigning and delivering a commodity; media for live species; or carrier conveyances. All of which alien organisms may be transported unintentionally to a new environment without knowledge of the persons involved in the entire value chain of a commodity as live species	Definition based on IPPC ISPM 5 definition and revised to reflect useage in UNEP/CBD/SBSTTA/18/9/Add.1 and Hulme et al. 2008.	^[1] Terminology is collectively crafted referring to : (i) OIE Guidelines for assessing the risks of non-native animals becoming invasive http://www.oie.int/doc/ged/D13931.PDF ; and IUCN definition on hitchhikers https://www.iucn.org/downloads/en_iucn_glossary_definitions.pdf
Feed	Feed for live animals include seeds, plants or plant products, animals or animal products, and mixture of these to be transferred within a consignment of live animals.		
Packing containers	Packing containers include: cages, boxes, pots, plastic bags and other means used for transport of live animals and plants in a confined condition to prevent their escapes.	Definition based on CABI glossary, Source: World Organisation for Animal Health (OIE)	https://www.cabi.org/isc/glossary/94610
Plant	Plant means any organism belonging to the kingdom Plantae, taking into account the definition of plant under the International Plant Protection Convention, which includes algae and fungi. Living plants and parts thereof, including seeds and germplasm.	International Plant Protection Convention ISPM with addition of clarification from CBD.	https://www.ippc.int/largefiles/adopted_ISPMs_previousversions/en/ISPM_05_2007_En_2007-07-26.pdf

[(Comment: The table above is new text and should be inserted in order to clarify the terms used in the text.)]

*Annex II***TERMS OF REFERENCE FOR THE AD HOC TECHNICAL EXPERT GROUP
ON INVASIVE ALIEN SPECIES**

1. The Ad Hoc Technical Expert Group shall undertake assessments on:
 - (a) Methods for cost-benefit and cost-effectiveness analysis which best apply to the management of invasive alien species;
 - (b) **Methods, tools and measures for identification and minimisation of risks** ~~of biological invasions~~ **[(Rationale: Clarification of demand)]** posed by **trade of invasive** alien species ~~sold via e-commerce and the impacts thereof;~~
 2. ~~The Ad Hoc Technical Expert Group shall develop elements of technical guidance on:~~
 - ~~(a) Management of invasive alien species, taking into account new potential risks arising from climate change and associated natural disasters and land use changes;~~
 - ~~(b) Risk analysis, taking into account the potential consequences of the introduction of invasive alien species on social, economic and cultural values; **[(Rationale: Overlap with upcoming IPBES assessments)]**~~
 - ~~(c) Classification of hazardous alien species and its relevant risk communication elements. **[(Rationale: Already done)]**~~
-

10 Conservation and Sustainable Use of Pollinators

Item 11 of the provisional agenda

Item 11 was introduced to the plenary of the Vilnius meeting by Rob Hendriks. The participants at the Vilnius meeting took note of the document UNEP/CBD/SBSTTA/22/10 and discussed the item. The results of the discussion are mirrored in the following changes in the document's suggested recommendations.

Document UNEP/CBD/SBSTTA/22/10:

Suggestions on the text:

CONSERVATION AND SUSTAINABLE USE OF POLLINATORS

Note by the Executive Secretary

INTRODUCTION

abridged; continued

III. SUGGESTED RECOMMENDATIONS

3. The Subsidiary Body on Scientific, Technical and Technological Advice may wish to adopt a recommendation along the following lines:

The Subsidiary Body on Scientific, Technical and Technological Advice

4. *Welcomes* the draft plan of action 2018-2030 for the International Initiative for the Conservation and Sustainable Use of Pollinators as contained in annex I to the present recommendation;

5. *Takes note* of the summary of information on the relevance of pollinators and pollination to the conservation and sustainable use of biodiversity in all ecosystems beyond their role in agriculture and food production provided in annex II to the present recommendation;

6. *Also takes note* of the draft full report on the relevance of pollinators and pollination to the conservation and sustainable use of biodiversity in all ecosystems beyond their role in agriculture and food production,¹ and *requests* the Executive Secretary to finalize the report taking into account peer review comments;

7. *Recommends* that the Conference of the Parties at its fourteenth meeting adopt a decision along the following lines:

Conference of the Parties,

Recalling decision [III/11](#), annex III, decision [V/5](#), annex I, decision [VI/5](#), and decision [XIII/15](#),

Underlining the importance of the outcomes of the IPBES assessment on pollinators, pollination and food production, and ~~Noting~~ the importance of pollinators and pollination for

¹ CBD/SBSTTA/22/INF/21.

all ecosystems, including those beyond agricultural and food production systems, and *recognizing* the important contribution of activities to promote the conservation and sustainable use of pollinators and pollination services in achieving the Aichi Biodiversity Targets as well as the Sustainable Development Goals,

Recognizing that activities to promote the conservation and sustainable use of pollinators and pollination services as a key element in the transition towards the achievement of a more sustainable food systems by fostering the adoption of more sustainable practices among agricultural sectors and across sectors,

1. *Adopts* the Plan of Action 2018-2030 for the International Initiative for the Conservation and Sustainable Use of Pollinators as contained in annex I to the present decision;

2. *Welcomes* the summary of information on the relevance of pollinators and pollination to the conservation and sustainable use of biodiversity in all ecosystems beyond their role in agriculture and food production contained in annex II[, **including the “Response options for the conservation and sustainable use of pollinators and their habitats” set out in part D of this annex**]² to the present decision;

3. *Encourages* Parties, other Governments and relevant organizations to **implement relevant activities from** ~~support the implementation of~~ the International Initiative on the Conservation and Sustainable Use of Pollinators through, among other things, the integration of appropriate measures into the implementation of national biodiversity strategies and action plans and relevant agricultural policies, plans and programmes;

4. *Urges* Parties **and invites other Governments and relevant organizations** to address the drivers of **wild and managed** pollinator decline in all ecosystems, including the most vulnerable biomes and agricultural systems, and to **reduce habitat loss and reduce and gradually phase out the use of harmful pesticides and other agricultural chemicals, and avoid the registration of those that are harmful to pollinators. [(Rationale: To make it more explicit)]** ~~Recognizing~~ ~~pay especially close attention at both the local and regional scales~~ **it is important to pay close attention** to the risk of introducing invasive alien species (plants, pollinators, predators, pests and pathogens) that are harmful to pollinators and to the plant resources on which they depend;

5. ~~*Encourages*~~ ~~*Invites*~~ Parties **and invites other Governments** to integrate the conservation and sustainable use of **wild and managed** pollinators and their habitats into land management policies;

5bis. Encourages Parties, other Governments and relevant organizations to develop and deploy monitoring of wild and managed pollinators in order to assess the magnitude of the decline and to evaluate the impact of deployed mitigation actions;

6. *Invites* the private sector to take into consideration the activities listed in the Plan of Action and to work towards the achievement of more sustainable production and consumption systems;

7. *Encourages* academic and research bodies, and relevant international organizations and networks, to promote **and conduct** further research in order to address gaps identified in the Plan of Action **and to synthesise and communicate information through appropriate channels to support implementation;**

8. *Invites* the Food and Agriculture Organization of the United Nations to facilitate the implementation of the Plan of Action, following the successful approach of the previous plan;

² At the time of the workshop the information note referred to in the Annex wasn't available, yet, so it was not possible to check for activities additional and relevant to the Action Plan in Annex 1.

9. *Invites* the Global Environment Facility and other donors and funding agencies to provide financial assistance for national and regional projects that address the implementation of the Plan of Action for the sustainable use and conservation of pollinators;

10. *Requests* the Executive Secretary to bring the present recommendation to the attention of the Food and Agriculture Organization of the United Nations and its Committees on Forestry, ~~the Committee on Agriculture,~~ **and World Food Security**, the Commission on Genetic Resources for Food and Agriculture, ~~the Committee on World Food Security~~ and the Secretariat of the International Plant Protection Convention as well as the Secretariat of the Basel, Rotterdam and Stockholm Conventions;

11. Requests the Executive Secretary when preparing for the post 2020-biodiversity framework to bear in mind the importance of the conservation and sustainable use of wild and managed pollinators. [(Rationale: The participants of the Vilnius meeting think it is very important that this topic is also taken up in the post 2020-biodiversity framework.)]

Annex I

UPDATED PLAN OF ACTION 2018-2030 FOR THE INTERNATIONAL INITIATIVE ON THE CONSERVATION AND SUSTAINABLE USE OF POLLINATORS

INTRODUCTION

abridged; continued

I. OBJECTIVES, PURPOSE AND SCOPE

abridged; continued

II. CONTEXT AND OVERALL RATIONALE

7. Animal-mediated pollination is a regulating ecosystem service of vital importance for nature, agriculture, and human well-being. This service is provided by pollinators, namely by managed bees, wild bees, and other insects, such as flies, moths, butterflies and beetles, as well as vertebrates, such as bats, birds and some primates. The assessment report on pollinators, pollination, and food production published by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES)³ underscores the role of pollinators in multiple respects. Nearly 90 per cent of the world's wild flowering plant species depend, entirely or at least in part, on animal pollination. These plants are essential for the functioning of ecosystems by providing other species with food, habitats and other resources. In addition, some self-pollinating crops, such as soybean, can also benefit from enhanced productivity by animal pollinator.

8. Strong declines of some pollinator taxa over the last few decades have been observed, although data on the status and trends of wild pollinators is limited, and largely restricted to some regions of Europe and the Americas. Risk assessments of the status of wild insect pollinators, such as wild bees and

³ IPBES (2016). [Assessment Report on Pollinators, Pollination and Food Production](#).

butterflies, are similarly geographically restricted but indicate high threat levels, with proportions of threatened species often exceeding 40 per cent.

9. At the same time, as global agriculture has become increasingly pollinator-dependent, much of this dependence is linked to wild pollinators.⁴ Beyond marketable products **and health benefits stemming from diverse and nutritious diets enabled by pollination**, pollinators provide non-monetary benefits for human well-being as sources of inspiration for arts and crafts, religion, traditions or recreational activities.

abridged; continued

III. ELEMENTS

Element 1: Enabling policies and strategies

abridged; continued

Element 2: Field-level implementation

Operational objective

To reinforce and implement management practices that maintain healthy pollinator communities, and enable farmers, beekeepers, foresters, land managers and urban communities to harness the benefits of pollination services for their productivity and livelihoods.

Rationale

In order to secure pollinator-friendly habitats and promote sustainable agroecosystems and pollinator husbandry, the direct and indirect drivers of pollinator decline need to be addressed in the field. Attention is needed at the farm level and across entire ecosystems. Landscape-level measures address connectivity and the value of managing across landscapes and sectors. Improved management measures for pollinators include attention to bee husbandry for honey bees and other pollinators.

Activities

A2.1 Co-design (with farmers, urban and rural beekeepers, land managers and indigenous peoples and local communities) and implement pollinator-friendly practices in farms and grasslands as well as urban and rural

A.2.1.1 Create uncultivated patches of vegetation and enhance floral diversity using mainly native species and extended flowering periods to ensure diverse, abundant and continuous floral resource for pollinators;

A.2.1.2 Manage blooming of mass-flowering crops to benefit pollinators;

A.2.1.3 Foster networks for exchanges of native seeds;

A.2.1.4 Promote genetic diversity and its conservation within populations of managed pollinators;

A.2.1.5 Promote extension services, farmer-to-farmer sharing approaches and farmer field schools to exchange knowledge and provide hands-on education and empowerment of local farming communities;

A.2.1.6 Diversify farming systems and the resulting food resources and habitats of pollinators through **home gardens and agroecological** ~~such~~ approaches **such** as crop rotations, intercropping, ~~home gardens,~~ agroforestry, organic agriculture, **and** ecological intensification ~~and agroecology~~;

⁴ Ibid.

A.2.1.7 Promote training and adoption of best practices for **integrated pest management (e.g. including weed management strategies and biocontrol)** and if necessary pesticide usage in the context of on-farm pollinator management (e.g. ~~weed management strategies, integrated pest management, biocontrol,~~ pesticide application timing, weather conditions, equipment calibration in order to reduce spray drift to off-field areas), and to avoid or minimize any synergistic effects of pesticides with other drivers that have been proven to pose serious or irreversible harm to pollinators;

abridged; continued

Element 3: Civil society and private sector engagement

abridged; continued

Element 4: Monitoring, research and assessment

abridged; continued

IV. SUPPORTING GUIDANCE AND TOOLS

A list of supporting guidance and tools is provided in an information note (CBD/SBSTTA/22/INF/20).

[(Comment: At the time of the workshop the respective information note wasn't available, yet. The participants of the Vilm meeting suggest that maybe the text from the Doc. CBD/SBSTTA/22/INF/20 should be inserted here (not just the reference to the document) if applicable.)]

Annex II

SUMMARY - REVIEW OF THE RELEVANCE OF POLLINATORS AND POLLINATION TO THE CONSERVATION AND SUSTAINABLE USE OF BIODIVERSITY IN ALL ECOSYSTEMS, BEYOND THEIR ROLE IN AGRICULTURE AND FOOD PRODUCTION

A. Introduction

1. The full report (CBD/SBSTTA/22/INF/21) and the present summary have been prepared pursuant to decision XIII/15. The report draws on the contributions of many researchers and partners around the world.⁵

⁵ The main authors of the report are Marcelo Aizen, Pathiba Basu, Damayanti Buchori, Lynn Dicks, Vera Lucia Imperatriz Fonseca, Leonardo Galetto, Lucas Garibaldi, Brad Howlett, Stephen Johnson, Monica Kobayashi, Michael Lattorff, Phil Lyver, Hien Ngo, Simon Potts, Deepa Senapathi, Colleen Seymour and Adam Vanbergen. The report was edited by Barbara Gemmill-Herren and Monica Kobayashi. A workshop convened from 27 to 29 November 2017 in collaboration with IPBES, the University of Reading, and the Convention on Biological Diversity brought together regional experts on pollinators to discuss and assess the role of pollinators and pollination services in supporting ecosystems beyond agricultural systems and in supporting ecosystem services beyond food production.

B. Roles and values of pollinators and pollinator dependent plants beyond agriculture

abridged; continued

C. Status and trends of pollinators and pollinator-dependent plants in all ecosystems

9. Many insect pollinators (e.g. wild bees, butterflies, moths, wasps and beetles) as well as vertebrate pollinators (e.g. ~~vertebrate~~ birds, marsupial, rodents and bats) have been declining in abundance, occurrence and diversity at the local and regional levels. The number of plant species that rely on pollinators is declining when compared to self-compatible or wind-pollinated plants.

abridged

11 Second Work Programme of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services

Item 12 of the provisional agenda

Item 12 was introduced to the plenary of the Vilm meeting by Barbara Livoreil. The participants at the Vilm meeting took note of the document UNEP/CBD/SBSTTA/22/11 and discussed the item. The results of the discussion are mirrored in the following changes in the document's suggested recommendations.

Document UNEP/CBD/SBSTTA/22/11:

Suggestions on the text:

SECOND WORK PROGRAMME OF THE INTERGOVERNMENTAL SCIENCE-POLICY PLATFORM ON BIODIVERSITY AND ECOSYSTEM SERVICES¹

Note by the Executive Secretary

BACKGROUND

abridged; continued

V. SUGGESTED RECOMMENDATION

41. The Subsidiary Body on Scientific, Technical and Technological Advice may wish to adopt a recommendation along the following lines:

The Subsidiary Body on Scientific, Technical and Technological Advice

1. *Urges* Parties and *invites* observers, as appropriate, to respond to the call from the Intergovernmental Science-Policy Platform for Biodiversity and Ecosystem Services for requests, inputs and suggestions in line with decision IPBES-6/2, paragraph (d);

2. *Requests* the Executive Secretary to transmit the list of elements contained in the annex to the present recommendation as scientific and technical information arising from the consideration of this item by the Subsidiary Body, to the Secretariat of the Intergovernmental Science-Policy Platform for Biodiversity and Ecosystem Services for the information of its Multidisciplinary Expert Panel and Bureau;

3. *Recommends* that the Conference of the Parties at its fourteenth meeting adopt a decision along the following lines:

The Conference of the Parties

1. *Welcomes* the progress in implementing the first work programme of the Intergovernmental Science-Policy Platform for Biodiversity and Ecosystem Services and

¹ In accordance with decision IPBES-6/2, the reference to a "second work programme" is replaced with reference to a "strategic framework up to 2030 and elements of the rolling work programme of the Platform".

requests the Executive Secretary to establish a procedure for the systematic consideration of all IPBES outcomes in developing and implementing the Convention;

1bis. Requests the Executive Secretary to analyse the outcomes of all IPBES products, including the Regional Assessments as well as the Land Degradation and Restoration Assessment, in the preparation of the post-2020 biodiversity framework and policy decisions under the Convention;

1ter. Requests the Executive Secretary to analyse the outcomes of the Land Degradation and Restoration Assessment with the view to updating the work on restoration activities under the Convention and to submit for consideration by SBSTTA to decide future steps prior to COP;

1quater. Encourages Parties, government and relevant organisations to use the outcomes of the IPBES thematic assessment on land degradation and restoration including for stepping up the implementation of the restoration action plan; [(Rationale: It seems relevant to ask that each output provided by IPBES should be taken into account in CBD activities.)]

2. *Also welcomes* the approval by the Plenary of the Intergovernmental Science-Policy Platform for Biodiversity and Ecosystem Services to undertake the thematic assessment of the sustainable use of wild species, the thematic assessment of invasive alien species, and the methodological assessment regarding the diverse conceptualization of multiple values of nature and its benefits;

3. Agrees Notes that the strategic framework up to 2030 and elements of the rolling work programme of the Intergovernmental Science-Policy Platform for Biodiversity and Ecosystem Services should will be relevant to the post-2020 global biodiversity framework, the Sustainable Development Goals and the Paris Agreement on Climate Change and may contribute to supporting its implementation and assessing progress, and recognizes ~~also notes~~ that the rolling nature of the work plan should ~~may~~ allow for further requests from the Convention in the light of the needs arising from the final form of the post-2020 global biodiversity framework;

4. *Encourages* the Intergovernmental Science-Policy Platform for Biodiversity and Ecosystem Services to further enhance its cooperation with the Intergovernmental Panel on Climate Change, in developing and implementing its work programme, with a view to promoting coherence between the scenarios and related assessments prepared in the context of biodiversity and climate change and to fostering further enhanced collaboration between the scientific communities related to these bodies;

5. *Invites* the Intergovernmental Science-Policy Platform for Biodiversity and Ecosystem Services to consider ~~and prioritize~~ the elements and requests contained in the annex to the present decision as part of its strategic framework and work programme towards 2030. [(Rationale: Too prescriptive – CBD should not tell IPBES what to do.)]

Annex

ELEMENTS AND REQUESTS FOR CONSIDERATION BY THE INTERGOVERNMENTAL SCIENCE-POLICY PLATFORM FOR BIODIVERSITY AND ECOSYSTEM SERVICES IN THE CONTEXT OF ITS STRATEGIC FRAMEWORK AND WORK PROGRAMME TOWARDS 2030

[to be completed at the meeting on the basis of sections IV and V of the present document]

[(Rationale: Parties and others will submit requests to IPBES before the end of September. The participants of the Vilnius meeting did not want to add to the list of thematic orientations and rather

focused on what CBD needs from IPBES to be more efficient in achieving post-2020 goals and implement transformational change as soon as possible.

As a consequence the participants of the Vilm meeting heavily relied on para. 38 and 39 of this document, and suggest that IPBES may apply an integrative approach to the requests it will receive, using its four functions in synergies to address nexus of themes (rather than keeping them separated) and provide pathways for successful change. As a start, the nexus could encompass suggestions made in para. 39, which mostly target the interrelatedness between agriculture, biodiversity, and health.

Although the content and approach of the post-2020 framework is still to be decided, it is clear that a robust knowledge base to inform and enable coherent policy decisions that catalyse transformational change should be a key element of the IPBES strategic framework and work programme towards 2030. All four functions of IPBES (assessments, knowledge generation, capacity building and policy support tools) need to be integrated when developing IPBES products to support transformational change.

As a consequence, IPBES is invited to:

1. Develop a multi-disciplinary approach to understand the interaction of drivers for transformational change. This should include insights gained from behavioural, social, economic, policy, institutional, technical and technological sciences;
2. Undertake nexus assessments of biodiversity with other areas to understand their linkages and trade-offs. Each of these assessments should cover a mix of the following areas: food and water, agriculture and health and nutrition, including implications for energy and climate;
3. Undertake a methodological assessment on criteria, metrics and indicators to measure transformational change;
4. Undertake methodological assessments on the effectiveness of various policy measures and policy support tools to achieve transformational change;
5. Undertake a methodological assessment on criteria, metrics and indicators suitable for operationalization by business, on corporate impacts on and benefits from biodiversity and ecosystem services, to enable business to reduce such impacts and to promote consistency in assessment and reporting;
6. Carefully consider the scope and timing of a possible future global assessment, including considerations of a single assessment that integrates the regional and global components building on the lessons learnt during the upcoming global assessment and the GBO-5. Overlap with other activities, analyses and assessments, including possible future editions of the Global Biodiversity Outlook, should be minimized and synergies maximized.)]

Annex I

abridged

European Expert Meeting in Preparation of the Twenty Second Meeting of SBSTTA (SBSTTA-22)

June 5 - 8, 2018

at the Federal Agency for Nature Conservation
International Academy for Nature Conservation,
Isle of Vilm, Germany

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European Expert Meeting in Preparation of SBSTTA-22

Part 1 (June 5-6): Digital sequence information on genetic resources, Risk assessment and risk management of LMOs, Synthetic biology

Part 2 (June 6-8): all other agenda items of SBSTTA-22

Objectives

The goal of the European expert meeting was to exchange information on topics on the agenda of the upcoming twenty second meeting of SBSTTA (SBSTTA-22) among experts from European countries. The informal discussions were mainly based on the documents prepared for the meeting by the Secretariat of the Convention on Biological Diversity (CBD).

Programme

MONDAY, JUNE 4

Arrival of participants attending part 1 of the workshop

18.30 *Dinner*

20.30 HORST KORN

Welcome and short introduction of the participants

21.00 *Informal get-together*

TUESDAY, JUNE 5

08.00 *Breakfast*

09.00 HENDRIK SEGERS

Digital sequence information on genetic resources

Discussion

10.00 MARGRET ENGELHARD

Synthetic biology

Discussion

11.00 *Coffee break*

11.30 ANNE GABRIELLE WÜST SAUCY

Risk assessment and risk management of living modified organisms

Discussion

12.30 *Lunch break*

14.00 **Drafting groups / Discussion groups**
Contribution to the workshop report

15.30 *Coffee break*

16.00 **Drafting groups / Discussion groups**
Contribution to the workshop report

18.00 *Dinner*

19.30 **Drafting groups / Discussion groups**
Contribution to the workshop report

Arrival of participants attending part 2 of the workshop

21.30 *Informal get-together*

WEDNESDAY, JUNE 6

08.00 *Breakfast*

09.00 **Plenary: Presentation of working group results from the topics of
part 1 and contribution to the workshop report**
Discussion

Finalization of part 1 and start of part 2 of the workshop

11.00 *Coffee break*

11.30 BARBARA LIVOREIL
**Second work programme of the Intergovernmental Platform on Bi-
odiversity and Ecosystem Services**
Discussion

12.30 *Lunch break*

13.30 *Guided tour through the nature reserve of the Isle of Vilm*

15.15 *Coffee break*

15.45 VINCENT FLEMING
**Updated scientific assessment of progress towards selected Aichi
Biodiversity Targets and options for accelerating progress**
Discussion

16.30 HUGO RENÉ RIVERA MENDOZA, ANKI WEIBULL
**Biodiversity and climate change: ecosystem-based approaches to
climate change adaptation and disaster risk reduction**
Discussion

- 17.15 KARIN ZAUNBERGER
Invasive alien species
 Discussion
- 18.00 *Dinner*
- 19.30 **Drafting groups / Discussion groups**
Contribution to the workshop report

THURSDAY, JUNE 7

- 08.00 *Breakfast*
- 09.00 KATHLEEN MACKINNON
Protected areas and other measures for enhanced conservation and management
 Discussion
- 09.45 JANOS HENNICKE, HENNING VON NORDHEIM
Marine and coastal biodiversity: ecologically or biologically significant marine areas, addressing anthropogenic underwater noise and marine debris, biodiversity in cold-water areas and marine spatial planning
 Discussion
- 10.30 *Coffee break*
- 11.00 ROB HENDRIKS
Conservation and sustainable use of pollinators
 Discussion
- 11.45 **Drafting groups / Discussion groups**
Contribution to the workshop report
- 12.30 *Lunch break*
- 14.00 **Drafting groups / Discussion groups**
Contribution to the workshop report
- 15.30 *Coffee break*
- 16.00 **Drafting groups / Discussion groups**
Contribution to the workshop report
- 18.00 *Dinner*
- 19.30 **Drafting groups / Discussion groups**
Contribution to the workshop report

FRIDAY, JUNE 8

08.00 *Breakfast*

09.00 **Drafting groups / Discussion groups**
Contribution to the workshop report

10.30 *Coffee break*

11.00 **Plenary: Presentation of working group results and contribution to the workshop report**
Discussion

12.30 *Lunch break*

14.00 **Plenary Plenary: Presentation of working group results and contribution to the workshop report**
Discussion

15.30 *Coffee break*

16.00 **Plenary: Presentation of working group results and contribution to the workshop report**
Discussion

18.00 *Reception at the invitation of the German Federal Agency for Nature Conservation*

SATURDAY, JUNE 9

Departure of participants

**PROPOSED ORGANIZATION OF WORK FOR THE TWENTY SECOND MEETING
OF THE SUBSIDIARY BODY ON SCIENTIFIC, TECHNICAL AND
TECHNOLOGICAL ADVICE**

	10 a.m. – 1 p.m.	3 p.m. – 6 p.m.
Monday 2 July 2018	1. Opening of the meeting 2. Organizational matters 3. Digital sequence information on genetic resources	4. Risk assessment and risk management of living modified organisms 5. Synthetic biology
Tuesday 3 July 2018	6. Updated scientific assessment of progress towards selected Aichi Biodiversity Targets and options to accelerate progress 7. Protected areas and other measures for enhanced conservation and management	8. Marine and coastal biodiversity: ecologically or biologically significant marine areas, addressing anthropogenic underwater noise and marine debris, biodiversity in cold-water areas and marine spatial planning 9. Biodiversity and climate change: ecosystem-based approaches to climate change adaptation and disaster risk reduction
Wednesday 4 July 2018	10. Invasive alien species 11. Conservation and sustainable use of pollinators	12. Second work programme of the Intergovernmental Science-policy Platform on Biodiversity and Ecosystem Services
Thursday 5 July 2018	Consideration of conference room papers	Consideration of conference room papers
Friday 6 July 2018	Consideration of conference room papers	Consideration of conference room papers
Saturday 7 July 2018	13. Other matters 14. Adoption of the report	14. Continued, as necessary 15. Closure of the meeting