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EXPERT WORKSHOP ON INVASIVE ALIEN SPECIES IN
PREPARATION FOR THE TWENTY-SECOND MEETING
OF THE SUBSIDIARY BODY ON SCIENTIFIC,
TECHNICAL AND TECHNOLOGICAL ADVICE
Montreal, Canada, 6–9 December 2017

WORKSHOP REPORT*

Chair: Mr. Piero Genovesi (ISPRA and IUCN- Invasive Species Specialist Group)
Rapporteur: Ms. Anna Isabela Gonzalez Martinez (Mexico)

I. INTRODUCTION

1. The expert workshop on invasive alien species in preparation for the twenty-second meeting of the Subsidiary Body on Scientific, Technical and Technological Advice was held at the conference room of the Secretariat of the Commission for Environmental Cooperation (CEC), on 393 St-Jacques Street West, Suite 200, Montreal, Canada from 6 to 8 December 2017. The list of participants can be found in annex I of this document.

II. BACKGROUND

2. In decision XIII/13 on invasive alien species the Conference of the Parties requested the Executive Secretary to explore or develop various guidance, and collect information and report to the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) Advice prior to the fourteenth meeting of the Conference of the Parties, as follows:

(a) To prepare draft supplemental guidance to incorporate unintentional introductions, as referred to in the fifth preambular paragraph above, to the existing 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 (decision XIII/13, para. 5);

(b) To explore with the World Customs Organization, as well as member organizations of the inter-agency liaison group on invasive alien species, the need for tools or guidance for Parties that may assist national customs authorities in facilitating the necessary control of live alien species via e-commerce (para. 9 (a));

(c) To identify options for supplementing risk assessment and risk management standards for the use of biological control agents against invasive alien species, including in aquatic environments (para. 16);

(d) To develop technical guidance for conducting cost-benefit and cost-effectiveness analysis for the management of invasive alien species (para. 17(b));

* Issued without editing.

(e) To develop guidance on invasive alien species management that takes into consideration the impacts of climate change, natural disasters and land-use change on the management of biological invasions (para. 17(c));

(f) To compile information on the potential consequences of invasive alien species on social, economic and cultural values, including the values and priorities of indigenous peoples and local communities (para. 17(d)).

3. Accordingly, the Executive Secretary sent notifications 2017-056¹ and 2017-074² to collect information from Parties, other Governments and relevant organizations on invasive alien species management³.

4. Based on the information submitted in response to the Notification 2017-056 and 2017-074, taking into consideration on geographic and gender balance of participation, CBD Secretariat invited experts to the Expert Workshop on Invasive Alien Species in Preparation for the twenty-second meeting of the Subsidiary Body on Scientific, Technical and Technological Advice in Montreal, Canada, from 6 to 8 December, 2017, in accordance with Appendix C (Informal workshop) of the consolidated modus operandi of the Subsidiary Body on Scientific, Technical and Technological Advice⁴. The Secretariat convened the workshop with the generous financial support from the European Union.

5. A total of 17 experts attended the workshop. These included representatives of the Governments of Barbados, Brazil, Cape Verde, Canada, Mexico, New Zealand, Sri Lanka, and Sweden, as well as Indigenous Peoples and Local Communities (IPLC) from New Zealand, and organizations such as the Global Biodiversity Information Facility GBIF, the International Union for Conservation of Nature (IUCN) and IUCN-Invasive Species Specialist Group (ISSG), and the Network of Regional Governments for Sustainable Development (nrg4SD). List of participants can be found in Annex I of this document.

6. In response to paragraph 9 of decision XIII/13 and other relevant decisions on invasive alien species (IX/4A, XI/28, XII/17), the Executive Secretary in collaboration with the World Customs Organization convened the eighth meeting of the Inter-agency Liaison Group on Invasive Alien Species in Brussels, Belgium from 22 to 23 November 2017 and consulted on the guidance setting mentioned in paragraph 1 (a)–(e)⁵.

7. Section III provides the outcomes of the Expert Workshop. A detailed information on the discussion points during the Expert Workshop can be found in annex II of this document.

III. OUTCOMES OF THE EXPERT WORKSHOP ON INVASIVE ALIEN SPECIES

Chapeau

8. The Expert Workshop highlights the progress made in national responses to address intentional introductions of invasive alien species through developing national and regional regulations in line with the rules and principles set under the World Trade Organization. The Expert Workshop recognized that these national responses can serve as a model for other countries;

9. The Expert Workshop highlights that the development of specific regulations on invasive alien species is a resource intensive process, and for many countries it would require capacity building and technology transfer, noting that national regulations were often built around existing regulations, *e.g.* animal health and plant protection;

10. The Expert Workshop also highlights that voluntary measures, such as guidance, codes of conduct, best practices and protocols are valuable tools to supplement and enhance the effectiveness of

¹ <https://www.cbd.int/doc/notifications/2017/ntf-2017-056-ias-en.pdf>

² <https://www.cbd.int/doc/notifications/2017/ntf-2017-074-ias-en.pdf>

³ Information will be posted on the CBD web site at <https://www.cbd.int/invasive/national-reports.shtml/>

⁴ <https://www.cbd.int/convention/sbstta-modus.shtml>

⁵ Information will be posted on the CBD web site at <https://www.cbd.int/ias/lg/>

the standards recognized by the World Trade Organization Agreement on the Application of Sanitary and Phytosanitary Measures;

11. The Expert Workshop stresses the importance of freely accessible data on invasive alien species and pathways of introduction provides critical support for decision making processes.

Supplemental Guidance on unintentional introductions

12. The Expert Workshop welcomed the work on the supplemental guidance undertaken by the Secretariat of the CBD, the Inter-agency Liaison Group on Invasive Alien Species and Parties' submissions. It concludes that additional work on the document is required. Submissions from key organisations including the International Plant Protection Convention (IPPC), the World Organisation for Animal Health (OIE), other selected experts and participants of the Expert Workshop will be accepted and incorporated prior to finalization of the draft.

13. The Expert Workshop suggested the Secretariat of the CBD to provide the finalized draft supplemental guidance as an Annex to a suggested recommendation to be presented to SBSTTA22. Once it is adopted by the Conference of the Parties, Parties, other Governments and relevant organizations can make use of the supplemental guidance as a tool to identify and manage the risks of unintentional introduction of invasive alien species associated with trade of live species, *i.e.* hitchhikers and contaminants.

E-Commerce

14. The Expert Workshop recognised the serious threat posed via e-commerce to biodiversity and ecosystem services, including the increasing opportunities of introduction of alien species in distant environments. The Expert Workshop highlighted that the primary way of addressing the risk associated with e-commerce is development of national regulations, to assist national customs agencies to enforce halting entries of invasive alien species. The Expert Workshop stressed the importance of data sharing and information flow on invasive alien species to facilitate the national process above.

15. The Expert Workshop felt that CBD national focal points should engage with national Customs authorities (the Customs Administration designated to the World Customs Organization) to raise the issue of invasive alien species, in collaboration, among the users and operators of e-commerce.

16. The Expert Workshop welcomed the E-commerce Working Group established by the World Customs Organisation, and encouraged the CBD Secretariat engages with this body.

17. The Expert Workshop highlighted the need to continue the work on e-commerce within the mechanisms of the CBD.

Data, tools and Aichi Biodiversity Target 9

18. The Expert Workshop welcomed the tools and databases developed in support of Aichi Target 9, that will enable data from diverse sources to be compiled, standardized, shared and made freely accessible via open data platforms; in particular, expert-curated national invasive alien species lists, aggregated occurrence data on invasive alien species both in native and introduced ranges, and pathway information, among others. Data on regulated invasive alien species is a significant gap in the existing standardised databases, above, and the gap needs to be filled. Existing tools that can act to identify species should be examined with a view to their wider application, taking account of variation of regulation on invasive alien species under different national jurisdictions;

19. The Expert Workshop emphasised the need for continued and increased investment in mobilization of invasive alien species data, to the maintenance and updating of shared data infrastructures, expert curation and building capacity in use of data-sharing tools and information on best practices. Ongoing support for data mobilization and free and open access is critical for progressing toward achieving Aichi Biodiversity Target 9, and managing invasive alien species in the face of climate change and e-commerce, as well as evaluating those response measures applied, including the use of biological control agents.

Biological control against invasive alien species

20. The Expert Workshop welcomed the input from Canada providing details on risk assessment and post release monitoring of biological control agents from the North American Plant Protection Organization's Regional Standards for Phytosanitary Measures⁶, which were built on the International Standard for Phytosanitary Measures No.3 and other international standards for risk analyses. The Expert Workshop stressed the importance that these standards, along with others (e.g. the methodologies or risk analysis of biological control agents used in Australia, New Zealand or United Kingdom), could supplement the "*Summary of technical considerations for the use of biological control agents to manage invasive alien species*" annexed to decision XIII/13.

21. The Expert Workshop highlighted that such standards, when applied comprehensively and with precaution, can be applied by the least developed countries, small island developing States and countries with economies in transition.

22. The Expert Workshop noted that the Guidance documents and the International Organization for Biological Control's best practices papers published on use of biocontrol agents can be used to provide additional guidance⁷.

Cost-benefit and cost effectiveness analysis

23. The Expert Workshop found that the cost-benefit and cost-effectiveness analysis framework produced by the IUCN would be a useful basis for enhancing the prevention and management of invasive alien species, noting its potential application for informing Parties on the pathways analysis and species prioritisation. The Expert Workshop stressed the importance for further research on this issue.

24. The Expert Workshop highlighted that submission of information on the methods used for pathway analysis and priority species to the CBD Secretariat is helpful to further develop the framework, which is urgently needed.

Invasive alien species management and climate change

25. The Expert Workshop interpreted that land use change and natural disasters in paragraph 17 (c) of decision XIII/13 were as the processes exacerbated by climate change.

26. The Expert Workshop highlighted that priority should be given to assessing what work has been done on the prevention and management of invasive alien species in the context of climate change, in order to identify gaps and understand how other relevant organisations/bodies are dealing with this issue.

27. The Expert Workshop suggested the CBD Secretariat to engage with UNFCCC to understand how best to address invasive alien species within the Nationally Determined Contributions and National Adaptation Plans that were considered under the UNFCCC process.

28. The Expert Workshop stressed the importance of incorporating the impacts of climate change within invasive alien species risk analysis (assessment, management and communication).

Social and cultural values

29. The Expert Workshop stressed that cultural and social values of Indigenous Peoples and Local Communities (IPLCs) and their livelihoods have been impacted by invasive alien species. The Expert Workshop also stressed the importance of self-determination and empowerment of IPLCs to incorporate their traditional knowledge and experiences into their invasive alien species management measures.

30. The Expert Workshop highlighted that a major challenge is the mobilisation of information on the effects of invasive alien species on social and cultural values of IPLCs. The Expert Workshop noted the importance of exploring alternative mechanisms to engage with IPLCs in mobilization of information.

⁶ https://www.nappo.org/files/1814/4065/2949/RSPM12_30-07-2015-e.pdf

⁷ <http://www.iobc-global.org/publications.html> ,

http://www.iobc-global.org/publications_iobc_internet_book_of_biological_control.html

31. The Expert Workshop noted that the work on cost-benefit and cost-effectiveness analyses aims to incorporate the impacts of invasive alien species upon social, economic and cultural values and livelihoods, as well as on their management.

32. The Expert Workshop stressed the importance of incorporating social and cultural values within invasive alien species risk analysis (assessment, management and communication).

Timeframe

33. Timeframe for preparation for the twenty second meeting of Subsidiary Body on Scientific, Technical and Technological Advice is suggested by the Expert Workshop as shown in the table, below.

Document title (shortened)	Before holidays	January 2018	February 2018	March 2018 onwards
Supplemental guidance on live species trade and transport	Clean copy reflected comments from IPPC, OIE and EWS by 23 December 2017	Inputs from relevant organizations and experts by the end of January /early February	Peer review process	Posting on SBSTTA Web site after editing by the end of March
Progress report on guidance tools setting on IAS management		Secretariat prepares draft	Peer review process	Posting by the end of March
Report of EWS	Secretariat shares draft report	Comments from participants	Posting on the meeting web site with link to information submissions from experts and Parties	
INF to SBSTTA22 Progress on risk management of e-commerce			WCO Conference on E-Commerce in China	→posting at the latest SBSTTA22 (SCBD internal review is required)
INF to SBSTTA22 IUCN proposed framework on technical guidance on cost-benefit analysis	→	→	→	→posting at the latest SBSTTA22 (SCBD internal review is required)
INF to SBSTTA22 EICAT, SEICAT, GIASI Partnership	→	→	→	→ posting at the latest SBSTTA22 (SCBD internal review is required)
INF to SBSTTA22 Impact of climate change, natural disaster and land-use	→	→	→	→posting at the latest SBSTTA22 (SCBD internal review is required)

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*Annex II***PROCEDURAL REPORT****ITEM 1. OPENING OF THE WORKSHOP**

34. Mr. David Cooper, the Deputy Executive Secretary of the Convention on Biological Diversity (CBD) welcomed the participants and opened the workshop at 9.30 a.m. on Wednesday, 6 December 2017. He presented on the history of invasive alien species as a cross-cutting programme under the Convention, including preparatory process and adoption of the *“Guiding Principles for the Prevention, Introduction and Mitigation of Impacts of Alien Species that Threaten Ecosystems, Habitats or Species”* annexed to decision VI/23g, and the works undertaken to address gaps and inconsistency of international regulatory framework relevant to invasive alien species. He also discussed the recent development of *“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”* and *“Consideration on the use of biological control agents against invasive alien species”*. He stressed that the risk of biological invasion and known impacts of invasive alien species on biodiversity are significant and are increasing with growing volumes of international trade and transport. The Secretariat established the Inter-agency Liaison Group on Invasive Alien Species (Liaison Group) together with relevant international organizations which set standards and guidelines on sanitary, phytosanitary and safe transport measures. The Liaison Group now includes important partners for the development of guidance covering invasive alien species in both terrestrial and aquatic environment and capacity developments for Parties to achieve Aichi Biodiversity Target 9. He also stressed that addressing invasive alien species can further advance the implementation of the Strategic Plan for Biodiversity by Parties, and it contributes to achieving other Targets, including the global targets set for the 2030 Sustainable Development Goals.

35. Ms. Junko Shimura of the Secretariat of the CBD briefly provided an overview of the workshop, including the objectives and the background of each agenda item. She explained that the workshop is an informal workshop in accordance with Appendix C of the consolidated modus operandi of the Subsidiary Body on Scientific, Technical and Technological Advice⁸ and all participants are equal in the workshop to discuss on scientific, technical and technological aspects of each agenda item. She briefly introduced on the working documents prepared by the Secretariat in consultation with the Liaison Group. She also informed the Expert Workshop that the working documents were not draft pre-session documents but rather to be considered by the Expert Workshop to provide advice technical information as a preparatory process of the pre-session and information documents to be presented to the twenty-second meeting of Subsidiary Body on Scientific, Technical and Technological Advice.

36. Participants were invited to elect a Chair and a Rapporteur for the workshop. Accordingly, participants elected Mr. Piero Genovesi as Chair and Ms. Ana Isabel González Martínez as Rapporteur.

37. Participants adopted the provisional agenda for the workshop ([CBD/IAS/EM/2017/1/1](#)). In agenda item 4, “other matters”, participants suggested the discussion of the risks of invasive alien species moving with sea containers, and the outcomes of the Meeting of the Ad Hoc Technical Expert Group (AHTEG) on Synthetic Biology, which took place simultaneously to this workshop.

38. Participants agreed on the organization of the work proposed by the Secretariat, as specified in Annex I to the annotations to the provisional agenda ([CBD/IAS/EM/2017/1/1/Add.1](#)).

⁸ One representative 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).

ITEM 2. PROGRESS ON THE DEVELOPMENT OF GUIDANCE AND TOOLS ON INVASIVE ALIEN SPECIES MANAGEMENT

Item 2.1. Draft supplemental guidance on the trade in live alien species as pets, aquarium and terrarium species, and as live bait and live food

39. The Chair invited a representative of the Secretariat to introduce the document relevant to this agenda item. Accordingly, she highlighted that the document “Draft Supplemental Guidance to the Existing 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 (hereafter Draft Supplemental Guidance)” was reviewed by the Inter-agency Liaison Group on Invasive Alien Species at its eighth meeting held from 22 to 23 November 2017 in Brussels, Belgium. Comments arrived from the International Plant Protection Convention (IPPC) and World Organisation for Animal Health (OIE) were shared with the Expert Workshop via email.

40. Participants were then invited to review the Draft Supplemental Guidance. As a result, participants considered the following:

(a) Participants welcomed the guidance and expressed appreciation for the work that has been done, and proposed that the organizations in the Inter-agency liaison group, experts and participants of the meeting be given additional time to comment on the draft guidance before finalizing the document.

(b) The best way to move forward was by either identifying gaps, filling them, developing specific guidance, or mapping existing international standards that can be applied to the issue;

(c) Mr Therriault, Canada stressed that wording in the preamble should include proactive measures if we are to successfully manage the risks of invasive alien species. Capacity building is important and would also benefit developing countries if all countries would implement proactive measures to prevent introductions of invasive alien species;

(d) The Chair stressed that despite the differences in unintentional introductions on invasive alien species, countries have adopted strict approaches towards the issue. One example is quarantine systems that follow the IPPC and its phytosanitary measures. Examples like this can encourage countries to adopt stricter measures to address unintentional introductions of invasive alien species. Taking this into account, the Chair suggested that countries use existing national and international laws, without the need to develop new legal tools;

(e) Ms. Josefsson, Sweden, stressed the importance of the Secretariat in acting as a bridge between the environmental and other international organizations dealing in some aspect relating to invasive alien species. This is due to the lack of familiarity of the CBD community, mostly in environmental sector, with the IPPC, OIE, WTO and other international regulatory frameworks relevant to invasive alien species. She highlighted examples from Australia, New Zealand, Norway and North American Plant Protection Organization (NAPPO) as a way forward;

(f) Participants realized that there is a grey area when discussing vectors of unintentional introduction of invasive alien species. They suggested that the draft supplemental guidance includes a session detailing such vectors. Examples provided by participants included conveyances including Commodity Transport Units (shipping containers) (e.g. ships’ biofouling, organisms attached to transport vehicles) and bedding materials, packaging materials including cage or boxes, seeds as well as other living organisms used to feed live animals. Usually, the sender does not indicate animal feed on the label of the consignment, as the import requirement applies only on the commodity;

(g) Participants suggested to further define the term “hitchhiker” and suggested to add references to the CBD, IPPC and OIE;

(h) Participants also suggested, where appropriate, the relevant standards to prevent unintentional introductions of invasive alien species recognized by the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement) established by the World Trade Organization (WTO) and other international organizations, should be considered in drafting the guidance,;

(i) Ms Kim Downes Agard, Barbados referred to a workshop recently held in the Caribbean (Capacity-building workshop for Caribbean small island developing States towards achieving Aichi Biodiversity Target 9, held in Kingston, Jamaica, 18-22 September 2017) and highlighted that even though much has already been done, there remain large capacity constraints in small island developing States (SIDS) to prevent introduction of invasive alien species. National regulations are not the only effective measures to prevent introduction of invasive alien species, and administrative policy procedures should also be mentioned in the guidance.

(j) Participants suggested that the draft supplemental guidance should reflect the diversity of legislative, administrative and policy measures used by countries to address the risks associated with the introduction of alien species as pets, aquarium and terrarium species, and as live bait and live food;

(k) Participants identified inconsistencies in the draft supplemental guidance when it refers to plants, animals and organisms. They suggested that the final document clearly specify what each paragraph refers to;

(l) Participants also suggested some text to specify the overall scope of the draft supplemental guidance;

(m) Participants further suggested that changing the title and language of the draft supplemental guidance to a softer, less mandatory language.

41. Given the need to deepen the discussion on certain topics of the draft supplemental guidance and the tight schedule of the workshop, participants agreed to further review the document remotely, after the workshop is concluded. A timeline for review is shown in Section II of this document.

42. The Chair suggested involving experts who were not able to attend the workshop in the review process, above mentioned in paragraph 41. Accordingly, participants agreed to compile a list of experts to be invited to further review the draft supplemental guidance.

Item 2.2. Tools for facilitating the necessary control of live alien species sold via e-commerce

43. The Chair invited a representative of the Secretariat to introduce the document relevant to this agenda item. Accordingly, she summarized the document “Progress on the development of tools or guidance for Parties that may assist national customs authorities in facilitating the necessary control of live alien species via e-commerce”. She highlighted that the document was presented to the Inter-agency Liaison Group on Invasive Alien Species, taking into account the ongoing efforts of the World Customs Organization, the Convention on International Trade in Endangered Species (CITES), and the IPPC. She also mentioned that the World Customs Organization (WCO) invited the Secretariat to the E-Commerce Working Group meeting to be held at the WCO in Brussels, Belgium in January 2018, and the Global Conference on E-Commerce to be held in Beijing, China in February 2018 to further exchange the views of relevant organizations and to address the risk of biological invasion.

44. Participants were then invited to discuss approaches to address the risk of biological invasion associated with live species sold via e-commerce. As a result, the Expert Workshop highlighted the following:

(a) The Secretariat highlighted the lack of awareness of the biological invasion risks among e-commerce sellers and buyers. Participants endorsed this and the Chair further illustrated it with an example that the market Ali Baba sold 90,000 live lobsters in one day;

(b) Participants stressed the importance of involving the CBD in the process of discussion on e-commerce under the WCO and other processes. Customs currently do not treat invasive alien species as harmful goods, and there is no screening process considering the risk of biological invasions, unless national regulations clearly require import measures on alien species of the country's concern. Participants also stressed that the CBD process has to continue to consider the risk posed by increasing e-commerce transactions and related transport;

(c) Participants also mentioned the importance of indicating ‘hazards to biodiversity’ in the label on the consignment of live species. This is because the filtering process in customs is based on

labels. With regard to consignment labelling, the Harmonized Commodity Description and Coding System (HS) established under the WCO was discussed. Participants pointed that HS Code indicates a taxon only at family level unless national customs apply further detailed code systems. A coding system also needs to be enforced by both the importing and exporting countries. Participants then stressed that it would be useful for custom authorities to have information on invasive alien species that threaten biodiversity on the label. They agreed that national customs offices require a list of invasive alien species that are of concern. And having trained customs officers dedicated to plant and animal pest inspections at the border is also important;

(d) The Chair highlighted that the WCO only considers species regulated under the national legislations. Also, sellers frequently do not know the name of the species that they are selling. In some cases sellers are not aware if the species sold via e-commerce are regulated in buyers' countries;

(e) Participants indicated there is an interest from e-commerce platform providers to cooperate as long as the process is clear and rapid. They also mentioned that a memorandum of understanding is being signed between the WCO and e-commerce platform providers. . It is important that the awareness raising and education on invasive alien species should use the same media or platform as used by e-commerce traders to ensure the message reaches the right audience. However, there is a need for clear lists and criteria for assessing risks and conducting physical inspections;

(f) In terms of assessing risks at the border, participants highlighted the pilot project conducted in Australia and New Zealand. In these countries, the WCO has tested the inclusion of postal services and using a product identification code or a different technology to track where the commodities are on their route to destinations. Although the pilot project does not include invasive alien species, it employs a coding system that allows a rapid risk assessment of every package based on rapid risk assessment guidelines;

(g) Participants suggested that the Secretariat strengthens the cooperation with the WCO, notably in concerns facilitating its connection with national customs offices, and inform the WCO and its tool setting bodies on the risks of invasive alien species;

(h) Participants also suggested that the Secretariat serve as a clearing house mechanism for information, tools, and best practices related to e-commerce. This mechanism could include the work of other organizations working with e-commerce such as the CITES and the IPPC.

(i) Participants stressed that e-commerce continues to grow and pose pressure of invasive alien species spread. Therefore, this topic needs to be considered continuously by the Subsidiary Body on Scientific, Technical and Technological Advice. Participants discussed the advantages and disadvantages of the processes to continue work with e-commerce within the CBD, and suggested establishing an Ad Hoc Technical Expert Group on invasive alien species and e-commerce, as one of options to be considered by SBSTTA.

Item 2.3. Options for supplementing risk assessment and risk management standards for the use of biological control agents against invasive alien species

45. The Chair invited a representative of the Secretariat to introduce the document relevant to this agenda item, "Options for supplementing risk assessment and risk management standards for the use of biological control agents against invasive alien species" prepared by the Secretariat and commented upon by Australia. The Secretariat highlighted that the document incorporates the discussions that occurred during the eighth meeting of the Inter-agency Liaison Group on Invasive Alien Species on Import Risk Analysis standards established by the OIE on pathogenic agents against animals.

46. Participants were then invited to provide additional information relevant to risk assessment and risk management of biological control agents. As a result, participants considered, as follows:

(a) Representatives of Canada suggested that the Secretariat include the risk assessment methods developed by the North American Plant Protection Organization⁹, a regional initiative that includes Canada, Mexico and USA, to the document;

(b) Mr. van Opzeeland, New Zealand, noted that New Zealand incorporates a qualitative risk assessment approach which assesses the risks, costs and benefits of classical biological control programmes¹⁰.

(c) Participants highlighted the importance of building the capacity to conduct non-target risk assessments in developing countries;

(d) Participants suggested that the document includes examples and best practices worldwide;

47. Participants suggested reporting this item to SBSTTA as progress on the summary of concerns annexed to decision XIII/13.

Item 2.4. Technical guidance for conducting cost-benefit and cost-effectiveness analyses

48. The Chair invited a representative of the Secretariat initiate the discussion on this agenda item and invited Mr. Smith, IUCN, to present a proposed framework to describe the costs and benefits of invasive alien species management that was contributed from IUCN ISSG members. He stressed that the proposed framework is quite comprehensive and was based on many studies and reports on costs and benefits of managing invasive alien species. A chart illustrating the framework is included in annex III.

49. Participants were then invited to comment on the framework and discuss the proposal developed by IUCN to elaborate an information document on “progress of developing technical guidance on the application of cost-benefit analysis for invasive alien species management”. Accordingly, participants noted the usefulness of the framework for different needs of the Parties such as the prioritization of pathways and the analysis of Aichi Target 9 achievement, as well as assessing the effectiveness of national legislation and policies.; To be able to write technical guidance on cost-benefit and cost-effectiveness analyses, participants felt that a continuation of the work is needed, as well as additional expert technical workshops to be convened.

Item 2.5. Consideration of the impacts of climate change, natural disasters and land-use change on the management of biological invasions

50. The Chair invited representatives of IUCN and the Global Biodiversity Information Facility to present their work on the impacts of climate change, natural disasters and land-use change, on the management of biological invasions in collaboration with the Secretariat and other organizations. Both presentations focused on the progress of data on invasive alien species and climate change.

51. Specifically, a representative of IUCN, provided an overview of the Global Register of Introduced and Invasive Alien Species (GRIIS), the Global Invasive Species Database, and the Environmental Impact Classification of Alien Taxa, also illustrating how all these products are interlinked, and interconnected to the IUCN Red List, and can be used to prioritise species for management and pathways for prevention. He illustrated progresses in assessing socio-economic losses caused by invasive alien species, based on innovative methodologies yet to be finalised¹¹.

⁹ The full discussion document on climate change and pest risk analysis prepared by members of the Pest Risk Analysis and Invasive Species Panels of the North American Plant Protection Organization (NAPPO) is available at https://www.nappon.org/files/4814/3781/8174/Climate_Change_Discussion_DocumentRev-07-08-12-e.pdf.

¹⁰ <https://www.landcareresearch.co.nz/publications/books/biocontrol-of-weeds-book>

¹¹ Bacher, S., Blackburn, T.M., Essl, F., Genovesi, P., Heikkilä, J., Jeschke, J.M., et al. (2017) Socio-economic impact classification of alien taxa (SEICAT). *Methods in Ecology and Evolution*, 2017, 1–10.

52. The Secretariat added that it has used data from GRIIS to produce country dossiers on the status of invasive alien species in the Caribbean to facilitate prioritization of invasive alien species, and selecting priority pathways and management measures in the small island developing States.

53. Mr. Tim Hirsch, GBIF Secretariat, focused his presentation on the open access to data on invasive alien species and climate change. He explained how data from GRIIS is available in GBIF. This included a demonstration of a “country profile page” equivalent with data on introduced and invasive species. He also provided examples of peer reviewed studies that have used data from GBIF and GRIIS in climate research¹².

54. Participants were then invited to discuss on the topics explored during the presentations by IUCN and GBIF and how to integrate them into the Secretariat’s process to bring the issues to the attention of Parties. Participants considered the following:

(a) Participants suggested that the Secretariat further engages with the United Nations Framework Convention on Climate Change (UNFCCC) in order to consider the impacts of invasive alien species;

(b) Participants suggested that the Secretariat consults with the programme officers in charge of climate change at the Secretariat to get ideas on the work related to invasive alien species and climate change under UNFCCC and CBD;

(c) Participants suggested the CBD community to explore methods developed by organizations other than the CBD such as the adaptation and mitigation of UNFCCC and pest risk analysis of North American Plant Protection Organization (NAPPO);

(d) The collection of scientific evidence related to the impacts of climate change, natural disasters and land-use change on the management of biological invasions is at early stages. Taking this into account, participants found that it is premature to provide guidance on this agenda item to SBSTTA22;

(e) Participants felt there is a need to address risks related to changing resulting from climate change. For example, changing practices can result in new pathways of introductions and assist colonization for different species. Examples discussed included changes in the choice of forestry species from native to non-native species¹³;

(f) Participants stressed the importance of incorporating climate change within invasive alien species risk analysis (assessment, management and communication), and the need to further develop relevant methods and models.

(g) Participants suggested that a search should be performed for relevant studies on the topic and climate change experts who have insights on invasive alien species should be invited to the future discussions.

ITEM 3. INFORMATION ON THE POTENTIAL CONSEQUENCES OF INVASIVE ALIEN SPECIES ON SOCIAL, ECONOMIC AND CULTURAL VALUES, INCLUDING THE VALUES AND PRIORITIES OF INDIGENOUS PEOPLES AND LOCAL COMMUNITIES

55. The Chair invited a representative of the Secretariat to introduce the document relevant to this agenda item. Accordingly, the Secretariat summarized the document “Information on the Potential Consequences of Invasive Alien Species on Social, Economic and Cultural Values, including the Values and Priorities of Indigenous Peoples and Local Communities” prepared by the Secretariat. She

¹² The study illustrated by Mr. Hirsch is entitled “Climate-change-induced range shifts of three allergenic ragweeds (*Ambrosia* L.) in Europe and their potential impact on human health” and is available at: <https://peerj.com/articles/3104/>

¹³ For a discussion on this issue see: IUCN/SSC (2013). Guidelines for Reintroductions and Other Conservation Translocations. Version 1.0. Gland, Switzerland: IUCN Species Survival Commission, viiii + 57 pp.

highlighted that the document incorporates the results of the survey on invasive alien species management conducted by the Secretariat¹⁴ from June to September 2017.

56. Participants were then invited to discuss the topics included in the document, notably how the concerns of Parties regarding the potential consequences of invasive alien species on social, economic and cultural values could be considered by SBSTTA. As a result, participants considered the following:

(a) Participants decided to focus the discussions on the impacts of invasive alien species on cultural values associated with the traditional knowledge of indigenous peoples. They agreed that the information on the potential consequences of invasive alien species on social and economic values would be covered by the information document to be further developed by IUCN under item 2.4. “technical guidance for conducting cost-benefit and cost-effectiveness analyses”;

(b) Ms. Hetaraka, IPLC based in New Zealand, provided an example of the impacts on invasive alien species on the cultural values of IPLCs. She highlighted how invasive alien species have negatively affected the spiritual connection between IPLCs and nature. In some cases, intervention made by national authorities could result in a loss of their traditional method to prevent introduction of, and minimize the impact of invasive alien species. Ms. Hetaraka highlighted the need for partnerships between IPLCs, governments and organizations to deal with the problems caused by invasive alien species together, instead of employing a “colonial” approach, in which IPLCs are told what to do and given financial resources for those purposes;

(c) Mr. Robichaud, Canada, and Ms. Gonzalez, Mexico, echoed the example described by Ms. Hetaraka and reinforced the importance of conducting consultations with IPLCs. Other participants also supported the formers opinions as there were similar cases observed in other regions;

(d) Participants stressed the importance of building solutions to invasive alien species problems in collaboration with IPLCs, and not imposing these solutions on them;

(e) Based on the contributions of Ms. Justice Hetaraka, participants also discussed ways of measuring the impacts of invasive alien species on cultural values in alternative ways to utilizing quantitative data. One possible way is to apply a similar “holistic approach” described by Mr. Smith, IUCN, during his presentation on cost and benefit analysis;

(f) Participants suggested further engaging IPLCs in invasive alien species discussions and activities. Ideas on how to improve IPLCs engagement included:

- (i) Involving IPLCs at initiation of invasive alien species management programme as early as possible;
- (ii) Inviting IPLCs as knowledge holders on biodiversity and establish communication on risk of biological invasions and possible management options;
- (iii) Inviting them to participate in invasive alien species discussions as well as join their processes of discussions to learn about their functioning structure and establish a two-way dialogue;
- (iv) Recognizing existing traditional knowledge that deals with invasive alien species risk management and the autonomy of IPLCs in managing invasive alien species based on their traditional knowledge.
- (v) Participants acknowledged the need to put mechanisms in place if the invasive alien species expert community aims at more engagement of IPLCs in invasive alien species issues;

¹⁴ For more information on the survey on invasive alien species management, consult CBD notifications [2017-056](#) and [2017-074](#).

- (vi) Participants suggested re-activating the engagement of IPLCs in invasive alien species processes that happened sporadically in the past. Invasive alien species expert community should reach out to IPLCs and invite their representatives to participate.

57. Participants mentioned that the approach used by the Secretariat to collect information on impacts on socio-economic and cultural values or on IPLCs by searching peer-reviewed publications might not be the best way. A better approach would be to collect information through workshops accustomed for different communities or regions to ensure required trust building and risk communication, instead of peer-reviewed literature search.

ITEM 4. OTHER MATTERS

58. The Chair invited participants to discuss on the items suggested during the adoption of the agenda. Accordingly, participants considered the following:

59. Risks of invasive alien species moving with sea containers:

- (a) The Secretariat informed that there is on-going process to supplement the IMO/ILO/UNECE Code of Practice for Packing of Cargo Transport Units (CTU Code)¹⁵ under the task force of the IPPC. However, the result is still not yet published;

- (b) Participants suggested the Secretariat contact Ms. Erica Jensen, Great Lakes Detector of Invasive Aquatics to include a description of their software that identifies the movement of species in the Great lakes¹⁶.

60. Outcomes of the Meeting of the Ad Hoc Technical Expert Group (AHTEG) on Synthetic Biology. Considering that the AHTEG meeting was not concluded, participants were unable to discuss this item.

61. Aichi Biodiversity Target 9 was considered under this agenda item. Participants highlighted the potential consideration by SBSTTA:

- (a) The importance of national and regional legislations to regulate invasive alien species, as well as of non-regulatory measures;

- (b) Data on invasive alien species included in regulations is a significant gap in existing standardised databases, and need to be filled. Existing tools to identify species under the regulations should be examined with a view to their wider application, taking account of variation in the form of invasive alien species regulation under different national jurisdictions

- (c) Prioritization of species and pathways based on the evidence recorded in GRIIS and Pathway management measures;

- (d) The importance of tools and databases developed in support of Aichi Target 9, in order to enable data from diverse sources to be compiled, standardized, shared and made freely accessible via open data platforms; for example, expert-curated national IAS lists (GRIIS), aggregated occurrence data on IAS (GBIF) both in native and introduced ranges, and pathway information and appropriate management tools.

62. The Chair invited Mr. Robert Höft, CBD Secretariat, to provide an overview of the discussions on the post 2020 agenda. The Chair highlighted the data available to create a specific target for invasive alien species, including metrics and indicators, to be included with the post-2020 agenda.

ITEM 5. CLOSURE OF THE WORKSHOP

63. The Chair invited the Secretariat to introduce the draft outcomes of the workshop. Participants adopted the draft as amended.

¹⁵ https://www.unece.org/fileadmin/DAM/trans/doc/2014/wp24/CTU_Code_January_2014.pdf

¹⁶ <https://www.glc.org/work/gldiatr>

64. The Secretariat thanked the European Union for its generous financial contribution and expressed gratitude to the participants for their active discussion and advice to the Secretariat based on their collective scientific and cultural knowledge.
65. The Chair expressed thanks to the participants for their valuable contributions.
66. The workshop closed at 5:00 p.m. on 8 December 2017.

Annex III

**PROPOSED FRAMEWORK TO DESCRIBE THE COSTS AND BENEFITS OF MANAGEMENT
OF INVASIVE ALIEN SPECIES**

