## PEER REVIEW COMMENTS AND RESPONSES RELATED TO THE PROPOSED LIST OF INDICATORS FOR THE STRATEGIC PLAN FOR BIODIVERSITY 2011-2020

- 1. The Subsidiary Body on Scientific, Technical and Technological Advice at its nineteenth meeting considered a document on indicators for the Strategic Plan for Biodiversity 2011-2020 (UNEP/CBD/SBSTTA/19/5) drawing on the work of the Ad Hoc Technical Expert Group on Indicators for the Strategic Plan for Biodiversity 2011-2020 at its meeting in Geneva, Switzerland, from 14 to 17 September 2015.
- 2. In its recommendation XIX/4, the Subsidiary Body on Scientific, Technical and Technological Advice took note of the proposed list of generic and specific indicators for the Strategic Plan for Biodiversity 2011-2020 identified by the Ad Hoc Technical Expert Group and requested a peer review of this list, including information on the source of the indicator and its underlying data, using the following criteria: availability of the indicator; its use in the *Global Biodiversity Outlook*; its suitability for communication; possibility for aggregation or disaggregation of data used.
- 3. In line with this request, the Executive Secretary issued notification 2015-130, dated 19 November 2015, inviting CBD National Focal Points, SBSTTA Focal Points, Primary National Focal Point to the Cartagena Protocol on Biosafety, National Focal Points on Access and Benefit-sharing, and relevant organizations including the secretariats of the biodiversity-related conventions, indigenous peoples and local communities and members of the Biodiversity Indicators Partnership to provide peer-review comments on the proposed list of indicators. A total of nine submissions from Parties<sup>1</sup> and 27 from organizations<sup>2</sup> were received by 10 February 2016 and were taken into account in preparing a revised list of indicators.
- 4. The peer review comments received are presented in the table below. Also included are responses indicating how the review comment was taken into account in the revision of the list of indicators.
- 5. In the light of the review comments received the proposed list of indicators has been refined. The revised list of indicators for the Strategic Plan for Biodiversity 2011-2020 is contained in the annex to document UNEP/CBD/SBSTTA/20/13 prepared for the twentieth meeting of the Subsidiary Body on Scientific, Technical and Technological Advice taking place in Montreal, Canada from 25-30 April 2016.

<sup>&</sup>lt;sup>1</sup> Canada, China, the European Union, Finland, India, Japan, Mexico, New Zealand and the United Kingdom of Great Britain and Northern Ireland.

<sup>&</sup>lt;sup>2</sup> Australian Museum, Birdlife, Conservation International, the European Union Joint Research Council, Food and Agriculture Organization of the United Nations, Fondazione Edmund Mach, Forest Peoples Programme, Friends of the Earth – Europe, German Centre for Integrative Biodiversity Research (iDiv), Global Forest Coalition, Harvard University, ICCA Consortium, Indian Council of Forestry Research and Education, Institut de recherche pour le développement (IRD), International Nitrogen Initiative, Groupement National Interprofessionnel des Semences et Plants (GNIS), IUCN, Morton Arboretum, Museo delle Scienze, the Natural History Museum, Organisation for Economic Co-operation and Development, Pennsylvania State University, Royal Society for the Protection of Birds, United Nations Convention to Combat Desertification (UNCCD), United Nations Division for Ocean Affairs and the Law of the Sea, Office of Legal Affairs (DOALOS/OLA), University of Auckland, University of Michigan, Whitley Wildlife Conservation Trust, Wildlife Conservation Society and the World Association of Zoos and Aquariums.

## Compilation of review comments and responses to them

The review comments have been organised by reviewer and row number. Row numbers refer to those used in the proposed list of indicators made available for peer review. Responses indicate what action was taken by the Secretariat of the Convention on Biological Diversity to address them. Short justifications for the responses have also been included where relevant.

Reviewer	Row Number	Heading	Review Comment	Response
BirdLife	17	Source	Change to "IUCN, BirdLife International and other Red List Partners"	Change made
BirdLife	27	Specific indicator	The number of cities tells us about the first clause of the target ("taken steps") but don't we want some synthesis or aggregation of the Index itself to tell us about the 2 <sup>nd</sup> clause ("the impacts of use of natural resources well within safe ecological limits")?	It is not clear what change is being suggested. No change to the proposed list of indicators has been made.
BirdLife	37	Source	Change to "IUCN, BirdLife International and other Red List Partners"	Change made
BirdLife	42	Source	Change to "IUCN and other Red List Partners"	Change made
BirdLife	43	Source	Change to "IUCN, BirdLife International and other Red List Partners"	Change made
BirdLife	64	Easy to communicate	I think this should be X as with the other RLIs. Probably our omission in the meeting.	Change made
BirdLife	64	Source	Change to "IUCN, BirdLife International and other Red List Partners"	Change made
BirdLife	75	Source	Change to "IUCN, BirdLife International and other Red List Partners"	Change made
BirdLife	80	Source	Change to "IUCN and other Red List Partners"	Change made
BirdLife	85	Source	Change to "IUCN, BirdLife International and other Red List Partners"	Change made
BirdLife	92	Specific indictor	Insert "Proposed indicator for SDG Target XX"	The list of indicators has been updated to reflect the documentation for the 47th sessions of the United Nations Statistical Commission. No change made.
BirdLife	94	Source	Change to "WCMC"	Change made
BirdLife	101	Source	Change to "IUCN, BirdLife International and other Red List Partners"	Change made
BirdLife	102	Source	Change to "IUCN, BirdLife International and	Change made

Reviewer	Row Number	Heading	Review Comment	Response
			other Red List Partners"	
BirdLife	103	Source	Change to "IUCN, BirdLife International and other Red List Partners"	Change made
BirdLife	110	Source	Change to "IUCN, BirdLife International and other Red List Partners"	Change made
BirdLife	116	Available Today	Change Y to X – this is an error: RLIs have been published for both species used for food and medicine and pollinators (the latter in Regan et al 2015)	Change made
BirdLife	116	Source	Change to "IUCN, BirdLife International and other Red List Partners"	Change made
BirdLife	General	Available today	BirdLife supports the inclusion of this column and the importance of distinguishing between those indictors with published peer-reviewed methods and results versus those that are described concepts but that have not yet been operationalised, peer-reviewed and published in the scientific literature. We note that a suite of indicators proposed by GEOBON, many of the proposed SDG indicators and a number of others fall into this latter category at present.	Noted
BirdLife	General	Specific indicator	It would be worth updating the table to reflect the latest SDG indicators (or at least to flag up any updates)	The SDG indicators have been updated in light of the documentation proposed for the 47th Session of the United Nations Statistical Commission
BirdLife	General	Used in GBO3 & 4	BirdLife further supports the emphasis on building on existing indicators. Those published in GBO3 and/or GBO4 mostly have wide acceptance, are familiar to Parties and have established institutional backing and delivery. It is important to build on existing knowledge, and while incorporating new indicators based on new datasets and emerging technology is useful, we should avoid constantly trying to reinvent the wheel or duplicating existing indicators.	Noted
BirdLife	General	Various	BirdLife further supports the fact that indicators	Noted

Reviewer	Row Number	Heading	Review Comment	Response
			scored as blank or Y in the "Available today" column cannot yet be scored for their ease of communication and global/ national disaggregation. We shouldn't try to second guess the answers while the indicators remain conceptual.	
Canada	0	0	The peer review of the indicators should not be restricted to the criteria provided. Any peer review must also consider fitness-for-purpose and I do not imagine it was the intention of the AHTEG to limit review.	The criteria used in the peer review were those established by SBSTTA at its 19th meeting
Canada	0	0	It would be useful to expand on each specific indicator to include a definition, unit of measure and target. These additions would greatly help in clarifying indicator statements.	SBSTTA recommendation 19/4 called for the development of further information on the indicators (indicator factsheets). This additional information could be included in these factsheets.
Canada	0	0	These comments are technical comments on the indicators listed in this table as requested in the notification. It is important, however, that a review of the proposed "small set of indicators" also be undertaken to ensure that the correct indicators have been selected for each target and that altogether, they will provide a comprehensive picture of progress against the strategic plan.	Noted
Canada	1	Available	Biodiversity Barometer does not provide adequate information on methodology, particularly on sample selection, biases arising from the use of internet surveys, and the scoring of correct definitions. http://ethicalbiotrade.org/dl/methodology%20x%20country%20and%20year%202015.pdf	Noted - The Biodiversity Indicators Partnership, through SBSTTA recommendation XIX/4 has been requested to compile additional information on the indicators. The additional information requested could be made available through this process. It is not clear what change is being proposed. No change has been made to the proposed list of indicators.
Canada	1	communicatio n	UEBT interpretations appear to assume direct comparability among countries, cultures and languages when reporting results. Of greater concern, they assume that recognition of the term	The indicator, like most indicators, has limitations which should be acknowledged when it is used. The indicator has previously been used in GBO-3 and 4. In the absence of additional

Reviewer	Row Number	Heading	Review Comment	Response
			is equivalent to an understanding of the concept (noted in CBD Technical Series No. 78, section 1.4). This makes the indicator potentially misleading, and the precise numbers give a false sense of confidence in the results.  Communication should either be restricted to conclusions that can be made with high confidence (trends within countries, for example) or the limitations of the results must be clearly expressed.	indicators, the indicator has been retained in the proposed list of indicators.
Canada	2	Specific Indicator	The indicator presupposes not only access to the internet, but also the societal expectation that a relevant body of knowledge can be found in an appropriate language. The indicator is difficult to interpret, as it is tangentially related to the target and is influenced in complex ways by varying degrees of internet access and media coverage of related issues.	The indicator, like most, has limitations, which should be acknowledged when the indicator is used. The indicator was used in GBO-4 and several studies in scientific journals have been published using Google Trends data. Similar several criticisms of the use of Google Trends information have also been published. In the absence of additional global indicators, the indicator has been retained in the proposed list of indicators.
Canada	3	Specific Indicator	This indicator could be improved by accounting for the proportion of children in secondary school. The indicator presupposes that a testing program is in place. Counts of Parties that have integrated biodiversity into school curricula may be more feasible in the short term.	The indicator was a proposed SDG indicator. The indicator has since been deleted in light of the most recent documentation prepared for the 47th session on the United Nations Statistical Commission. Regarding the indicator proposed by the comment, it is not clear if this indicator currently exists or is being developed. It is also not clear if the underlying data exists. For this reason no change to the proposed list has been made.
Canada	5	Specific Indicator	It is not clear what will be counted: the number of countries with environmental-economic accounting programs? Number of countries with some minimum number of resource accounts completed and influencing policy? Would accounts be for particular products (timber, for	The indicator measures the number of countries which have natural resource accounts under the SEEA framework. The data and methodology are developed by the UNSTATS and the World Bank. No change to the proposed list of indicators has been made.

Reviewer	Row Number	Heading	Review Comment	Response
			example), systems (forest) or ecosystem services (C sequestration, water regulation)? Physical biological resources appear to be the target, but most countries will already have timber accounts and will trivially be counted. This indicator may be appropriate for measuring early stages of implementation but is not sufficiently sensitive to capture continued progress.	
Canada	6	Specific Indicator	Should be rephrased as "Number of <i>Parties</i> with National Economic Ecosystem Assessments <i>or</i> subnational assessments."	The indicator has been removed from the proposed list as it is not clear who was developing it or if it was currently available
Canada	7	Specific Indicator	It would be better to count number of Parties rather than number of plans/processes, otherwise the degree of progress can be distorted by whether Parties choose to address the Target with one large or several smaller initiatives. Better yet would be to assign each Party a score based on the degree of biodiversity integration, but this is likely to be impracticable.	The indicator was a proposed SDG indicator. The wording of the SDG indicator has been updated to reflect the most recent document prepared for the 47th sessions of the UN Statistical Commission.
Canada	8	Available	Roe 2010, provided as a source, contains some interesting analysis but does not contain an actual indicator. Some methodology is required to create an index that accounts for the relative importance of biodiversity in the documents listed, but also accounts for the increasing number of Parties with such documents.	The proposed indicator is not an index but a simple count of the number of countries that integrated biodiversity into various development plans. In the absence of another indicator, the proposed indicator has been retained and its limitations should be acknowledged when it is used.
Canada	9	Generic Indicator	The generic indicator proposed, "trends in the number and value of incentives, including subsidies, harmful to biodiversity, removed, reformed or phased out," does not provide any more specificity than the wording of the target itself. Likewise, the specific indicator is identical to the generic indicator, so it does not provide additional clarity.	The specific indicator has been removed from the proposed list of indicators.
Canada	9	Specific Indicator	As UNEP/CBD/WG-RI/4/INF/8 notes, the indicator is difficult to interpret, as Parties with	The specific indicator has been removed from the proposed list of indicators.

Reviewer	Row Number	Heading	Review Comment	Response
			large existing subsides have larger amounts to remove from subsidies and the indicator does not require application of these funds to positive incentives. Data to support this indicator are scattered, and a sector-by-sector approach to reporting might be more useful.	
Canada	10	Specific Indicator	It is difficult to see how to interpret this indicator with respect to biodiversity without further indicator development. For example, any support to producers appears to be treated the same way, whether it is payments in support of maintaining habitat on farmland, or subsidies for chemical inputs. Limitation to "amber box" subsidies would be helpful but is not a complete solution.	The indicator has been developed by the OECD and they also collect the data. Additional information on the interpretation of the indicator and its link to biodiversity could be included in the indicator factsheets that SBSTTA requested the BIP to prepare. No changes have been made to the proposed list of indicators.
Canada	11	Specific Indicator	Again, it is difficult to see how to interpret this indicator with respect to biodiversity.	The indicator has been developed by the OECD and they also collect the data. Additional information on the interpretation of the indicator and its link to biodiversity could be included in the indicator factsheets that SBSTTA requested the BIP to prepare. No changes have been made to the proposed list of indicators.
Canada	12	Communicatio n	It should be made clear that the indicator includes only instruments that are intended to improve biodiversity outcomes.	The proposed indicator is being developed by the OECD. The indicator is still under development so its criteria have been left blank for the time being.
Canada	12	Specific indicator	Most land use instruments in Canada act at the provincial level and would not be included in these indicators. The term 'national' could be replaced by 'national or sub-national'; alternatively, a separate indicator for 'subnational instruments' for the five categories of instruments could be created.	The proposed indicator is being developed by the OECD. The indicator is still under development so its scope has not yet been defined. No change has been made to the proposed indicators.
Canada	13	Specific Indicator	PES has had varying success: before including Parties in the count, an assessment of the outcomes should be required.	The indicator has been removed from the proposed list as it was not clear if the indicator currently exists or if it is being actively developed.

Reviewer	Row Number	Heading	Review Comment	Response
Canada	14	Specific Indicator	Again, programs need to be assessed to determine if outcomes are positive for biodiversity before being included.	Information for the indicator is derived from the UN REDD+ programme. It is not clear what change to the indicator is suggested. No change has been made to the proposed list of indicators.
Canada	16	Specific Indicator	Biodiversity offset schemes must be well designed if they are to have a net beneficial effect. Many stakeholders are skeptical of a process that is seen as providing "permission to destroy". Before including Parties in the count, an assessment of the scheme should be required.	The indicator has been deleted. It is not clear if the indicator exists or is being developed.
Canada	17	Specific Indicator	The Red List Index provides an excellent assessment of the state of biodiversity, but it only captures rather large changes. It should be paired with an indicator that provides a signal early enough inform policy and management decisions. An example might be the Living Planet Index (already reported by BIP), which although limited in its taxonomic coverage, provides a more sensitive and timely measure of change.	The Red List Index, like most indicators, has limitations that should be acknowledged when it is used. The Living Planet Index is included in the proposed list in relation to several targets. However a specific disaggregation does not appear to be available for utilized species. For this reason the LPI is not repeated under this Aichi Target. No change has been made to the proposed list of indicators.
Canada	18	Specific Indicator	Ideally this would account for countries that not only have legislation in place, but that enforce that legislation. This may be difficult to assess, and the indicator as listed is a reasonable proxy.	Noted. No change made to the proposed list of indicators.
Canada	19	Availability	It is difficult to see how it will be possible to reliably measure, or even estimate, illegal wildlife trade. Unsustainable use might be better measured as the number of wildlife (including plants) populations that are threatened by overharvest, legal or illegal. Parties could be surveyed to generate the underlying data, although some care would need to be taken to avoid conflating improved information with an increasing number of overharvested species.  The SDG metadata suggests using the value of	The indicator is a proposed SDG indicator. No changes have been made to the proposed list.

Reviewer	Row Number	Heading	Review Comment	Response
			CITES-listed wildlife seizures as an estimate of the amount of illegal trade. This is bound to be a vast underestimate.	
Canada	20	Specific Indicator	The <i>Ecological Footprint</i> is intended as a measure of combined demand for ecological services in comparison to supply but it is incomplete, methodologically inadequate, and has been widely criticized as such (reviewed in TS 78). Recent development has improved the indicator, but it remains for the most part a measure of GHG emissions. Repackaging an emissions indicator in a simple form has increased the reach of communication, but its meaning is misperceived by the public, mainly due to the name of the indicator. Using the ratio of GHG emissions to Earth's sequestration capacity directly as an indicator would be more correct and more useful to decision makers.	The Ecological Footprint, like many indicators, has limitations. These should be acknowledged when the indicator is used. The Ecological Footprint has been used in GBO-3 and GBO-4 and it is possible to remove the GHG element from the indicator. It is not clear if the proposed indicator exists or if it is being developed. No change has been made to the proposed list of indicators.
Canada	21	Specific Indicator	It is unlikely that productivity will be an appropriate measure, as the impact of resource extraction is not related to the subsequent economic productivity of its use. A better measure would be habitat area disturbed for resource extraction. Data sources and methodology are needed.	The indicator was a proposed SDG indicator. It has been replaced by a new indicator in line with the documentation prepared for the 47th sessions of the United Nations Statistical Commission.
Canada	22	Specific Indicator	Plans are an insufficient indicator for this target. The indicator should assess implementation. Without a source and methodology, full assessment and recommendations are impossible.	The indicator is a proposed SDG indicator. No changes have been made to the proposed list.
Canada	23	Specific Indicator	If identical to publication (http://www.pnas.org/content/112/20/6271.full), potentially useful for some communications purposes, but equivalence of all materials, expressed in tons, is a difficult assumption. 1 ton of metal ore is not very similar to 1 ton of crops. This is somewhat akin to adding pesos and	The indicator is a proposed SDG indicator. No changes have been made to the proposed list.

Reviewer	Row Number	Heading	Review Comment	Response
			dollars together because they are all money. (The problem is more tractable for money because conversion is possible, unlike for resources.)	
			Per capita measures are irrelevant for biodiversity, as it is the total take which has an impact. Per capita measures may be useful for determining which drivers are important and for assessing the effectiveness of interventions.	
Canada	24	Specific Indicator	HANPP is a useful indicator of human pressure on ecosystems at broad scales, but of necessity it depends on models and strong assumptions to help it deal with data limitations. Additional work is required to determine if it has sufficient sensitivity to detect changes at a scale relevant to the Aichi targets. For example, the effects of increasing crop productivity may be detectable, but effects of improved rangeland management are likely impossible to capture.  In any case, it should be renamed to acknowledge that it assesses only terrestrial NPP. PPR (reported in GBO4) is the marine equivalent.	The indicator has been published and is largely known as HANPP. No change to the proposed list of indicators has been made,
Canada	25		[in GBO4, Water Footprint is discussed, but impacts are assessed with the Freshwater LPI and threats to human water security; the Footprint itself appears superfluous]	The choice of indicator would depend largely on the assessment being undertaken. It is not clear what change is being suggested. No change has been made to the proposed list of indicators.
Canada	26	Specific Indicator	Like per capita measures, efficiency measures are poor indicators of target achievement because it is the total take which has an impact, but such measures may be useful for detecting early signs of progress.  (MG) definitions refer to how well plants use water during their life cycle. The SDG goal	The indicator is a proposed SDG indicator. The wording of the indicator has been updated to reflect the most recent proposal from the 47th session of the United Nations Statistical Commission.

Reviewer	Row Number	Heading	Review Comment	Response
			applies to all human economic sectors (i.e., agriculture, mining, forestry, etc.). There isn't enough information available about the indicator to really comment.	
Canada	27	Specific Indicator	The number of cities reporting is a measure of mainstreaming and more relevant to Target 2.	The chapeau of the document notes that indicators may be relevant to more than one Aichi Target but that in order to keep the length of the document manageable indicators have only been included in the table once. The cities biodiversity index is as a self-assessment tool for cities to benchmark and monitor the progress of their biodiversity conservation efforts. As such it addresses a number of different issues and is relevant to multiple targets. No change has been made to the proposed list of indicators.
Canada	28	Specific Indicator	Per capita and efficiency measures are poor indicators of target achievement. Total land take would be preferable. The indicator then becomes equivalent to trends in natural habitat extent (row 33).	The indicator is a proposed SDG indicator. No change has been made to the proposed list of indicators
Canada	29	Specific Indicator	A measure of mainstreaming and more relevant to Target 2. The indicator should be able to distinguish the causes of trends, to allow clear interpretation of changes that may be due to increasing numbers of reporting businesses or to an increasing number of reports that refer to ecological issues.	The indicator has been removed from the list as it is not clear if the indicator currently exists or if this is being actively developed.
Canada	33	Communicatio n	This is a clear and understandable indicator. However, the large land area of Earth tends to make even large changes appear small – perhaps a baseline that considers the target language (rate of loss to be halved) could be considered. "Urban" should be defined in a way that includes all infrastructure (including, for example, roads and industrial sites), such as the "settlement" AFOLU category used by UNFCCC.	The indicator has been developed by PBL. It is used in their scenario and modelling work. It is not clear what change is being suggested. No change has been made to the proposed list of indicators.

Reviewer	Row Number	Heading	Review Comment	Response
			"Agriculture" as used here should include tree plantations. Pasture lands are agricultural but will be difficult to detect and include.	
			North American urban areas often include extensive "remnant" forests which continue to function as relatively normal ecosystems (Rouge Valley / peri-urban south-central Ontario as local examples). Underlines the critical importance of definitions applied to this indicator.	
Canada	34	Available	Sufficient data exist for weak proxies – trends in road density, for example, would be better than no indicator. There may be sufficient data to assess some coastal systems, potentially available through the IPBES assessments.  Canada does not have good quality national data to report on this.	It is not clear if the proposed indicators currently exist or if they are being actively developed. No change has been made to the proposed list of indicators.
Canada	35	Specific Indicator	The Biodiversity Habitat Index as in UNEP/CBD/ID/AHTEG/2015/1/INF/13 has insufficient information available for a critical appraisal; in particular, the effect of uncertainty in the underlying land cover classification and other models may make it difficult to detect any but the broadest trends. As described, it is a model of the expected impact of land use change on species richness – it may be more appropriate for the Target 4 element relating to the impact of natural resource use.	The indicator is under active development. For this reason the different criteria have been left blank. The indicator positioning is the result of the discussions of the AHTEG, including the input from the indicator developer. No change has been made to the proposed list of indicators.
Canada	36	Generic Indicator	In the developing world an understanding of forest degradation as a process that alters forest structure and function is emerging. In Canada's boreal and temperate forests such definitions are not finalised. There are some who consider any form of forest management as a form of forest degradation. That these are not trivial issues can	The wording of the generic indicator mirrors the wording of the Aichi Target. No change to the generic indicator has been made.

Reviewer	Row Number	Heading	Review Comment	Response
			be explored in the 2003 IPCC Task report on Degradation: http://www.ipcc-nggip.iges.or.jp/public/gpglulucf/degradation.ht ml. Also, forests can be degraded from many perspectives (see: An Operational Framework for Defining and Monitoring Forest Degradation, Ecol and Soc 18, 2013). This is a very complex subject and simply saying 'reducing degraded forest' without saying what that actually means is insufficient. Many forests are degraded without even losing their appearance as a forest (e.g., all the mahogany is gone, all the apes are dead and/or they are full of invasive species). So simply using that word opens a huge definitional issue. Saying 'land' degradation is even worse because it is even less specific than forest or soil or shrubland.	
Canada	36	Specific Indicator	Assuming this is the indicator set described in UNEP/CBD/ID/AHTEG/2015/1/INF/5, the method is credible and it is likely to provide the best available estimates. Given that the assessment of land use change tends to be less certain that the assessment of land use itself, there may be some need to assess whether apparent change, based on remotely sensed data at the global level, corresponds to actual change, based on ground observations.  It would be good to also have an indicator about trends in degradation of freshwater ecosystems. Perhaps trends in river diversion and dam construction over a certain size.	It is not clear if a change is being suggested. It is not clear if the indicator referred to in the comment currently exists or is being developed. No change has been made to the proposed list of indicators.
Canada	37	Specific Indicator	Red List index (forest specialists) This indicator tends to detect only large changes and to have a long time lag, as changes are only detected when impacts are sufficient to cause changes in Red	The indicator, like many, has limitations which should be acknowledged when it is used. The Red List Index is not the only indicator identified for this target. No change has been made to the

Reviewer	Row Number	Heading	Review Comment	Response
			List categories. It should be used in conjunction with indicators more sensitive to short-term changes.	proposed list of indicators.
Canada	38	Specific Indicator	The LPI efficiently re-uses existing information, and there is likely to be reasonable information for vertebrate forest specialists. The use of population trends rather than extinction risks allows for a more sensitive and timely indicator than the RLI, although taxonomic narrowness and limited aquatic data are considerations. Underlying data will be biased towards accessible and exploited systems, so the index may be pessimistic. Reported LPIs tend to have high uncertainties.  Using trends in grassland specialists would also be appropriate and I think available.	It is not clear what change is being suggested. No change to the proposed list of indicators has been made.
Canada	39	Specific Indicator	The Species Habitat Index as described in UNEP/CBD/ID/AHTEG/2015/1/INF/13 appears to be attempting to extract fine-grained information from existing data and models which are of coarser grain. While the description notes quite correctly that remotely sensed data are more spatially and temporally resolved than before, most species cannot be well modelled from a land-cover class alone. These indicators may be more appropriate for local use, making best use of broad-scale information to identify potential issues. At the global level, they will be sensitive to the species selected for inclusion and the quality of information available for those species. If a representative set of species can be selected, it will become an indicator of land-cover change, weighted by species richness.	The indicator is listed as being under active development in the proposed list of indicators. It is not clear what changes are being suggested. No change has been made to the proposed list of indicators.
Canada	40	Specific Indicator	Number of MSC certified fisheries to a large degree reflects market demands (potentially linked to Target 1, biodiversity awareness) and	The indicator, like many, has limitations which should be acknowledged when it is used. Certification is one tool to promote sustainable

Reviewer	Row Number	Heading	Review Comment	Response
			the ability of fishing operations to support the costs of certification. A link between certification and environmental or socioeconomic outcomes has not been demonstrated; STAP has a good analysis of this issue, although it is becoming dated.	management and as such the information this indicator provides is useful. However as noted any assessment would need to make use of additional indicators and/or additional sources of information. No change to the proposed list of indicators has been made.
Canada	43	Specific Indicator	This RLI subset has the advantage of accounting for impacts on both target and non-target species and is complementary to the RLI subset on row 42. However, detection of impacts with RLI will generally describe impacts that have occurred years or decades earlier. While a good choice to describe the state of biodiversity, it is unlikely to be applicable to measuring progress under the CBD.	The indicator, like many, has limitations which should be acknowledged when the indicator is used. It is not clear what change to the proposed list of indicators is being suggested. No change to the proposed list of indicators has been made.
Canada	44	Specific Indicator	This formulation of the LPI would also include species of no commercial value, which is an asset. It could be further improved for this purpose by including non-vertebrates – this is a rare case where there may be sufficient data.	It is not clear if the suggested indicator currently exists or is being developed. No change has been made to the proposed list of indicators.
Canada	45	Specific Indicator	Metadata cannot readily be found. From related documents, it is not clear what element is being assessed as "effort" – it appears to be based on fleet tonnage, but it is not clear how trawlers are identified, nor how days at sea are measured. Estimates of the bottom area trawled/dredged (annual or in 5-y periods, for example) and sea bottom area protected from contact would be easier for the public to understand.	The indicator has been developed by UBC and the indicator has been used in GBO-4. It is not clear what change is being suggested and/or if the indicator suggested in the comment currently exists. No change to the proposed list of indicators has been made.
Canada	46	Generic Indicator	Under "trends in destructive fishing practices," one of the specific indicators is "dollar value of negative fishery subsidies against 2015 baseline." It is not clear why this specific indicator is here, as the relationship between "negative subsidies" and destructive fishing practices is loose and tenuous at best.	The generic indicator has been modified to remove the word destructive. The specific indicator was an SDG indicator which has since been replaced. The SDG indicator has been updated in light of the most recent documentation prepared for the 47th session of the United Nations Statistic Commission.

Reviewer	Row Number	Heading	Review Comment	Response
Canada	46	Specific Indicator	The indicator cannot be peer-reviewed without defining "subsidy," "negative fishery subsidies" and providing a data source. The SDG process has not provided metadata either. For the indicator to be useful, it must address subsidies which have a net negative effect specifically on biodiversity; effects on profitability are not relevant in this context. Some subsidies have a greater negative impact per dollar of subsidy, and this should be taken into account in at least a coarse-grained way. It seems unlikely that the level of analysis required can be produced with the resources available.  Even if well defined, it would be a poor indicator of whether stocks are managed and harvested sustainably; and furthermore it would in some sense duplicate the separate indicator under target 3. So we would advise that this specific	The indicator was a proposed SDG indicator. In light of the most recent documentation prepared for the 47th session of the United Nations Statistic Commission this indicator has been replaced.
Canada	47	Communicatio n	indicator be removed from target 6.  Based on SDG metadata, the indicator requires renaming. "Within biologically sustainable levels" is defined as "abundance of the fish stock is at or higher than the level that can produce the maximum sustainable yield." In non-technical use, "biologically sustainable" would mean stable population sizes unlikely to go extinct. Suggest the indicator be renamed "Proportion of fish stocks maintained at high population productivity"  The indicator is reliable and consistent (although incomplete).	The indicator is a proposed SDG indicator. Its wording reflects the most recent documentation for the 47th session of the United Nations Statistical Commission
Canada	49	Specific Indicator	This indicator is intended to assess access to markets and does not address Target 7.  Combined with other information, it may support	The indicator was a proposed SDG indicator. The indicator has been replaced in light of the documentation prepared for the 47th session of

Reviewer	Row Number	Heading	Review Comment	Response
			assessment of the proportion of IUU fishing.	the United Nations Statistical Commission.
Canada	50	Specific Indicator	"organic" is essentially a certification. As noted for row 40, certification reflects market demands (linked to Target 1) and the ability of operations to support the costs of certification, not sustainable management. A link between certification and environmental or socioeconomic outcomes has not been demonstrated; see the STAP analysis.  Agricultural land under organic production is not automatically positive for biodiversity. For example, manure applied to a field can lead to nutrient runoff impacting on water quality if best practices are not followed. And organic farming may not increase overall production efficiency which can impact on land-use change. Would recommend removing this indicator.  Looking at sustainability as a process, rather than a binary yes/no determination, alternative metrics could be considered: proportion with nutrient management plans / 4R, or Integrated Pest Management, in addition to area under conservation agriculture which is already included (see comments for rows 51, 52).	This indicator, like most, has limitations which should be acknowledged when they are used. In the absence of additional indicators, this one can provide useful information, though it would need to be complimented by other sources of information. The indicator has previously been used in GBO-4. It is no clear if the indicators proposed in the comments currently exists or are being actively developed. No change to the proposed list of indicators has been made.
Canada	52	Specific Indicator	Supporting material for "sustainable agricultural practices" provided through the SDG process suggests a range of actions which may be counted in the future: as the indicator develops, care must be taken to avoid double counting, and the minimum standards for including areas must be set reasonably high – improving land management from "very bad" to merely "bad" should not count.	The wording of the indicator has been updated in light of the documentation prepared for the 47th session of the United Nations Statistical Commission.

Reviewer	Row Number	Heading	Review Comment	Response
			BIP reports something similar to the SDG indicator, but notes that is it a proxy for the desired indicator – the proxy's name ("Area of agro-ecosystems under management practices which support sustainability") should be used for clarity.	
Canada	53	Specific Indicator	Similar indicators could be developed for managed forests and for coastal areas supporting aquaculture. The RLI is complementary, as it addresses a broader taxonomic group, but it may be difficult to apply to areas under aquaculture.	The Living Planet Index for forest specialists is included in the proposed list of indicators. It is not clear what change is being suggested in the comment. No change has been made to the proposed list of indicators.
			The comprehensive legislative and regulatory framework that governs forest management in each province and territory provides assurances that our forests are managed sustainably. These laws, regulations and polices govern various aspects including planning land use, forest management, public consultations, Indigenous participation, protected areas, tenures and allocation of wood for harvesting, and regeneration of forest land.	It is not clear what indicators are being proposed
Canada	55		Governments in Canada support third-party forest certification as a tool to demonstrate the rigor of Canada's forest management laws, and to document the country's sustainable forest management. The lack of certification does not indicate that a forest area is not sustainably managed. For example, small private landowners often do not obtain forest certification due to costs.	to included and if they have more than one data point. No change has been made as it is not clear what indicators are being suggested for inclusion.
			In the FAO's 2015 Global Forest Resources Assessment (GFRA), the Food and Agriculture Organization (FAO) published a series of indicators on SFM that look at how much of the	

Reviewer	Row Number	Heading	Review Comment	Response
			world's forests have the "enabling environment" for Sustainable Forest Management (SFM) (e.g., how much of the world's forests is in the permanent forest estate, has SFM policies, has SFM legislation, has a platform for stakeholder participation, has a forest inventory, has national reporting, has management plans, and has stakeholder involvement in operational planning, operations and review) – (see GFRA fig 11) In the view of the FAO, these are essential items to enable SFM, or at least greatly increase the likelihood that SFM will be practiced. These indicators are reported every 5 years by the FAO, are quantitative, and almost all countries provided data.	
Canada	56	Communicatio n	In the SDG metadata pg 341, FAO describes this as "a measure of forest area <i>potentially</i> under Sustainable Forest Management" (italics mine) – this important caveat should be retained in the indicator name as it could be misleading otherwise.	The indicator was a proposed SDG indicator. The wording of the indicator has been updated to reflect the wording from the most recent documentation prepared for the 47th session of the United Nations Statistical Commission.
Canada	56	Specific Indicator	The method of calculation for this indicator is not clear. FAO's GFRA 2015 uses a suite of indicators to assesses whether enabling conditions exist to support SFM: if this is the intended measure, the indicator should be renamed from "forest cover" and alignment to the GFRA methodology should be exact and explicit (see comments under line 55 above and refer to http://dx.doi.org/10.1016/j.foreco.2015.02.005 for example). Metadata for SDG indicator 15.2 suggests a somewhat different indicator, but it remains unclear whether the measured entity corresponds to physical hectares for which all 6 elements are in place.	The indicator was a proposed SDG indicator. The wording of the indicator has been updated to reflect the wording from the most recent documentation prepared for the 47th session of the United Nations Statistical Commission.

Reviewer	Row Number	Heading	Review Comment	Response
			In either case, it must be made clear whether the indicator is forest area under SFM, or a measure of the degree to which enabling conditions for SFM have been established in a country. The existing indicators appear to assess enabling conditions rather than sustainable management itself.	
Canada	57	Specific Indicator	The term "Net permanent forest loss" is in effect a measure of "net change in forest area" – provided that the forest definition is consistent with FAO or UNFCCC allowing for temporarily non-treed areas (recently disturbed, harvested) that are expected to grow back to forest to stay in the definition of forest. Need to ensure there is an understanding that these indicators refer to landuse rather than land-cover criteria.  Also the indicator is a bit simplistic; suggesting changing to "Net permanent forest loss by major forest type" (13 forest types are defined by the FAO).	The indicator has been removed in light of the documentation prepared for the 47th Session of the United Nations Statistical Commission.
Canada	58	Generic indicator	This seems aligned with LPI methodology – see row 53. For temperate species, trends in tree population sizes may also be possible to determine. Extinction risk is likely to be impossible to assess for production forest only. Question why this is so specific? Total population is what is of interest, and few data will be available except for a handful of species. Even then, how to separate those in primary and protected forests from production forest. Overall, in an indirect way, CITES trade data and listing proposals which include population decline estimates are available, but only for species and specimens in which international trade takes	The generic indicator focuses specifically on production forests. The LPI refers to forest specialists generally. No change has been made to the proposed list of indicators.

Reviewer	Row Number	Heading	Review Comment	Response
Canada	59	Specific Indicator	place.  "Global" emissions updated every year do not exist. The Emissions Database for Global Atmospheric Research (EDGAR) previously provided some global emissions but it was not updated recently. The last update was done in 2011. More up-to-date information can be found in the data used under the convention of long range transport of air pollution (CLRTAP-UNECE). Data for the European countries, United States and Canada are available annually. The Quality of the data is high and follows common reporting guidelines. The OECD also reports these emissions using the CLRTAP-UNECE source and from the UNFCCC GHGs submissions (For SOX and NOX only). Sometimes they used their own country questionnaire. This is done yearly. There are also many scientific articles that study global or regional emissions using modelling. The best data available right now are the ones from the CLRTAP.	The proposed indicator has been divided to look at each element separately. For NOx and SOx information is available from INI for POPs the Stockholm Convention has information.
Canada	60	Communicatio n	Likely the best available indicator, but measurement in tonnes presents difficulties. For trends to be interpretable, information on changes in the relative proportions of different pesticides should be included, along with an interpretation of the likely effects. The rise of neonicotinoid insecticides is very much in the public eye, and addressing relative toxicity of pesticides will be an important element of credibility.	It is not clear what change is being suggested. No change to the proposed list of indicators has been made.
Canada	61	Specific Indicator	Is this the same indicator as used for the MDGs? Not clear why limited to CFCs only. Could be paired with impact indicator (UV irradiance, data from NASA)	The indicator has been removed from the list.

Reviewer	Row Number	Heading	Review Comment	Response
Canada	62	Specific Indicator	NUE (assuming OECD methodology) is probably more appropriate for Target 7. For pollution impacts, nitrogen balance is a better choice. Counting only mineral N inputs (excluding manure) limits utility of the indicator.	The indicator has been removed in light of the documentation prepared for the 47th session of the United Nations Statistic Commission
Canada	63	Specific Indicator	It would be preferable to use a sub-element of this indicator – PM2.5, unweighted by population. The indicator as formulated for the SDGs s focused on human health.	The indicator is a proposed SDG indicator. Its wording reflects the most recent documentation for the 47th session of the United Nations Statistical Commission
Canada	64		RLI (pollution impacts)	It is not clear what change is being suggested. No change has been made.
Canada	65	Specific Indicator	Water Quality Index for Biodiversity (MG) The calculation for this indicator is based on the CCME water quality index and was developed for the Environmental Performance Index. The indicator design is good. It was dropped from the EPI due to challenges estimating change through time. Another problem will be data availability in GEMS database. Canada's water quality data is vastly underrepresented in their database and it is old.	It is not clear what change is being proposed. No change has been made to the proposed list of indicators.
Canada	66	Specific Indicator	From Lamarque et al 2010? BIP indicators are from the International Nitrogen Initiative, but do not appear to be active.	The proposed indicators are from the International Nitrogen Initiative and are active. No change has been made to the proposed list of indicators.
Canada	69	Specific Indicator	This indicator overlaps considerably with the WQI (row 65) and should be discarded.	The indicator has been retained as it is a proposed SDG indicator. No change has been made to the proposed list of indicators.
Canada	70	Specific Indicator	Biodiversity impacts would be better assessed using total volume of insufficiently treated wastewater, rather than proportions. The suggested disaggregation is good – in particular, sewage and wastewater from hazardous industries should not be combined.	The indicator has been retained as it is a proposed SDG indicator. No change has been made to the proposed list of indicators.
Canada	73	Communicatio n	Assuming the BIP indicator, this is a good choice. Context on the economic cost of IAS and	The indicator and data are from IUCN and its partners. No change to the proposed list of

Reviewer	Row Number	Heading	Review Comment	Response
			of eradications, and on the proportion of IAS that are candidates for eradication, would support public understanding. High rates of success for eradication attempts are good news, but people should not be led to the conclusion that damage can be readily reversed.	indicators has been made.
			Eradication is mostly feasible on islands, rarely at the national level (for non-island countries) and the geographic scope of eradication should be defined (small islands?). If it is clear that the indicator is for islands, it is fine.	
Canada	75	Specific Indicator	The long time lag of the RLI (as changes only occur when invasive species have already had sufficient impact to cause changes in Red List categories) is an issue here, as the target focusses on prevention. Changes in the indicator will likely reflect events prior to the adoption of the Aichi Targets and communications should reflect this. Nonetheless, it is important to report on impacts.	It is not clear what change is being suggested. No change to the proposed list of indicators has been made.
Canada	77	Specific Indicator	It is difficult to determine if data quality is sufficient to support this indicator; existing variants appear to be limited to a few countries and data are of inconsistent completeness. By the nature of introductions, it is difficult to detect and assess species at early stages, leading to uncertainty of detection and classification.  Uncertainty surrounding changes in rates of introduction is expected to be even higher. In any case, "Introduction Events" should be well defined (e.g. introduction, eradication, reintroduction = 1 or 2 events?).	It is not clear what change is being suggested. No change to the proposed list of indicators has been made.
			If the data are adequate, disaggregation into terrestrial/freshwater/marine introductions would	

Reviewer	Row Number	Heading	Review Comment	Response
			be helpful.	
Canada	79	Availability	This indicator, marked as available today in the review document, cannot be readily located. BIP uses Butchart et al 2010; coral data are regional but cover most of the global distribution.	Mumby etal refers to the source of the data set. No change made to the proposed list of indicators.
Canada	82	Availability	Could consider reef area protected through notake MPAs and other effective measures.	It is not clear if the proposed indicator exists or is being developed. No change to the proposed list of indicators has been made.
Canada	83	Availability	For marine areas, could consider sea temperature and aragonite saturation (Jiang et al 2015, doi:10.1002/2015GB005198.)	The proposed indicator is not directly related to the Target. The target is about reducing the effects of pressures other than climate change and ocean acidification on vulnerable ecosystems. No change to the proposed indicator has been made.
Canada	84	Specific Indicator	The cited paper is for part of Europe only. The approach is interesting but it is not clear that it is suitable for global-level reporting. Climatic effects on terrestrial systems may be better assessed through climate-induced changes in vegetation, such as treeline shift (and loss of arctic and alpine vegetation) and tree dieback due to precipitation change/systemic drought.	The indicator currently has limited geographic coverage. This should be acknowledged when the indicator is used. Despite the limited coverage, it still provides useful information. It is not clear if the additional suggested indicators currently exist. No change to the proposed list of indicators has been made.
Canada	86	Availability	Global GHG emissions would seem to be an appropriate indicator here.	The target focuses on pressures on ecosystems impacted by climate change and ocean acidification. As such the suggested indicators do not directly relate to the Aichi Target. No change to the proposed list of indicators has been made.
Canada	92	Specific Indicator	As reported by BIP, this indicator seems to be a combination of #91 and #94.	While there is some overlap, the indicators do address different issues. No change to the proposed list has been made.
Canada	93	Availability	For some ecosystems services, conservation (protection + other measures) of key ecosystems could be used as a proxy here. For example, the proportion of coral reefs, mangroves, seagrasses, etc. that have been conserved could be used as coarse measure of the degree to which "coastal	Noted. The comment does not appear to imply a change to the proposed list of indicators. No change made to the proposed list of indicators has been made.

Reviewer	Row Number	Heading	Review Comment	Response
			protection" as an ecosystem service has been conserved.	
Canada	97	Specific indicator	Does not yet have adequate data coverage but is best available. It seems unlikely that sufficient resources will be available to do a comprehensive assessment.	Noted- No change to the proposed list of indicators has been made
Canada	98	Specific indicator	Information on the completeness and representativeness of the underlying data are required.  It is unclear if a performance analysis would provide a qualitative or quantitative assessment. A qualitative response may discuss Government of Canada support and provide a storyline on new funding allocated (e.g. National Conservation Plan). A quantitative response may look at program funding and would require financial analysis, which is more time consuming and would not necessarily refer to effectiveness or equity in management of conserved areas as different levels of funding will be required in different contexts.  Amount of funding is not a good indicator. Some areas require more funding than others, sometimes lots of money is spent without making a positive contribution to the target, other times lots can be done for little money. Suggest deleting this as an indicator. Other indicators suggested here are better for this target.	The indicator has been removed from the proposed list of indicators.
Canada	99	Specific indicator	Insufficient information on methodology is available to allow review of this indicator.	The indicator has been marked as under development.
Canada	100	Specific indicator	No methodological or descriptive information seems to be available.	The indicator has been removed from the proposed list of indicators as it was not clear if the indicator was available or was being actively developed.

Reviewer	Row Number	Heading	Review Comment	Response
Canada	101	Communicatio n	Should be renamed to number of <i>known</i> extinctions	This is implied. Further the Aichi Target Specifies known species. No change to the proposed list of indicators has been made.
Canada	102	Specific indicator	It may be difficult to determine if the prevention was due to "conservation action" (depending upon the definition of conservation action). It also doesn't necessarily matter why, for this target, the extinction was prevented, just that it is prevented. Suggest 101 and 102 be combined and focus on the number of "known threatened" species extinctions to reflect the target.	The two indicators provide complimentary information. The first tracks the number of extinctions while the second looks at extinctions prevented. The indicators provide related but different information. No change to the proposed list of indicators has been made.
Canada	103	Specific Indicator	The Red List Index is the best available match to this target. Once the sampled index is available, it should likely supplant the RLI itself.	Noted - No change to the proposed list of indicators has been made.
Canada	104	Specific Indicator	There is a potential to create sub-indices of the LPI to examine trends for species most in decline, as specified in the target. Care should be taken to account for the lower signal-to-noise ratios in datasets for rare species, however.	Noted - No change to the proposed list of indicators has been made.
Canada	106	Specific Indicator	The LBII is an innovative and promising approach. Interpretation should focus on MSA, as changes in richness cannot be unambiguously interpreted as "good" or "bad," and furthermore the re-use of existing information means that taxonomic coverage varies over geographical space, with unknown effects on measured richness. As noted for other indicators, species presence is difficult to model from land use information, and land use change maps tend to have fairly high error rates. Trends must be interpreted with this in mind.	Noted - The indicator is under development. No change to the proposed list of indicators has been made.
Canada	107	Specific indicator	Information on the completeness and representativeness of the underlying data are required. See comment row 98 re use of information on funding as an indicator.	The indicator has been removed from the list.
Canada	108	Specific	The ex situ crop collections enrichment index is	The indicator is a proposed SDG indicator. The

Reviewer	Row Number	Heading	Review Comment	Response
		indicator	only a very partial indicator at best, and the methodology is still listed as under review by the BIP. Canada has repeatedly recommended that it would be more appropriate to take advantage of indicators adopted in 2013 by the members of the FAO Commission on Genetic Resources for implementation of the Second <i>Global Plan of Action on Plant Genetic Resources for Food and Agriculture</i> . These indicators take account of much more scientific information than the proposed specific indicator. In 2015, the Commission endorsed a model for three higher-order composite indices for plant genetic resources for food and agriculture. Country of origin is not a proxy for genetic distinctiveness, because crop genetic diversity is commonly higher in countries where these have been introduced. Work towards measuring underlying genetic diversity must be encouraged.	wording of the indicator has been updated to reflect the most recent proposal from the 47th session of the UN Statistical Commission.
Canada	109	Generic Indicator	The generic indicator is about animals and specific indicator includes plants – doesn't align	The specific indicator includes both plants and animals. It would not align with either generic indicator because the generic indicators address plants and animals respectively. No change has been made to the proposed list of indicators.
Canada	109	Specific indicator	The proposed specific indicator is only classified as a proposed "alternative" SDG 2.5 indicator, for which more in-depth discussion is still needed and/or methodological development needs to be undertaken. The FAO Commission on Genetic Resources, at its Fourteenth Regular Session, agreed to the use of specific process and resources indicators and related targets to monitor the implementation and impact of the Global Plan of Action on Animal Genetic Resources for Food and Agriculture. These indicators take account of much more scientific	The proposed SDG indicators have been updated to reflect the documentation prepared for the 47th session of the United Nations Statistical Commission.

Reviewer	Row Number	Heading	Review Comment	Response
			information than the proposed specific indicator. They have already been used by the Commission to report on status and trends for animal genetic resources.	
Canada	110		The Red List Index may be insufficiently sensitive to detect change within the next 5 years. The Living Planet Index could be considered for animal species.  In both cases, more work is needed to identify the wild relatives of crops and farm animals.	The indicator is under development. It is not clear if the indicator suggested in the comment is currently available. No change to the proposed list of indicators has been made.
Canada	111		See row 39	The indicator is listed as being under active development in the proposed list of indicators. It is not clear what changes are being suggested. No change has been made to the proposed list of indicators.
Canada	112		Many protected areas cite presence of wild relatives as a justification for designation, but very few identify wild relatives of crops and domesticated animals as compared to other wild species. Even fewer analyze the genetic diversity of these wild relatives to measure the degree of coverage. A possible approach to an indicator might measure trends in the state of knowledge about protected area coverage of wild relatives, i.e. research projects or publications on this topic, at least until there is enough information to indicate trends in coverage with a reasonable degree of credibility.	It is not clear what change is being suggested. No change has been made to the proposed list of indicators.
Canada	113	Specific indicator	The FAO Forest Genetic Resources (FGR) group has an indicator SP4 for their Global Plan of Action on FGRs and their verifiable indicator is the "Trend in the number of species that are described for which distribution and/or genetic parameters are known" (information is available	It is not clear if the suggested indicator exists or what the possibility is of it being available in the near future. No change to the proposed list of indicators has been made.

Reviewer	Row Number	Heading	Review Comment	Response
			in their database REFORGEN). REFORGEN distinguishes between socio-economic and culturally value species so perhaps their information could be used for this indicator.	
Canada	114	Specific indicator	This is a desirable indicator and can be measured using the indicators adopted by the members of the FAO Commission on Genetic Resources.	Noted
Canada	115	Specific indicator	Another source for wetland extent is listed at row 32. It is assumed that these are the same indicator.  Many other habitat indicators are also relevant here. As specific services are often sought from particular habitat types, measuring the area of these types provides a reasonable first approximation of trends. Overlays with protected and OEABCM areas provide an indication of the degree to which they are safeguarded.	It is not clear that they are the same indicator. The first indicator is a proposed SDG indicator. Depending on the outcomes of the 47th session of the United Nations Statistical Commission, the indicators may need to be revised. No change to the proposed list of indicators has been made.
Canada	117	Specific indicator	While trends in species used directly for food, fibre and fuel could be tracked, many of these products are derived from domesticated or common wild species that can be substituted to some degree; population trends are likely to be small and not highly relevant to service delivery. In the limit, all species could be argued to provide some services because they are integral parts of ecosystems.	It is not clear what change is being suggested. No change to the proposed list of indicators has been made.
Canada	118	Specific indicator	Comments supplied for the Species Habitat Index on row 39 apply here. It is difficult to see how species supplying different ecosystem services could be usefully modelled in a single index. In fact, even species supplying the same service are difficult to combine – it would be difficult to interpret a combined trend of wild meat that included bats and river fish. Such a trend does not measure the meat available, nor	The proposed indicator is currently noted as being under development. It has been retained until it is operational at which point its suitability should be reviewed. No change to the proposed list of indicators has been made.

Reviewer	Row Number	Heading	Review Comment	Response
			the ability of the system to provide meat.	
Canada	119	Specific indicator	No methodological or descriptive information seems to be available. It is difficult to see how such a broad subject could be integrated into a single index.	The indicator name has been revised to reflect the wording used by OECD. The indicator has been developed by OECD and information on the indicator is available from http://www.oecdbetterlifeindex.org/#/11015515155. No change to the proposed list of indicators has been made.
Canada	120	Specific indicator	Available literature is unclear whether this is woody cover, or vegetated cover. In any case, it appears that the purpose of the indicator is to assess land degradation in mountainous areas, and it is not clear what additional information MGCI would provide over the indicator described in row 36.	The indicator is a proposed SDG indicator. No change has been made to the proposed list of indicators
Canada	121	Availability	All ecosystems provide some services. To be meaningful, a restoration indicator would need to focus on systems that provide particular services. Several of these are already included in the indicator set – such as systems that are used to provide fish, or that sequester carbon – and could be used here.	Noted. No change made to the proposed list of indicators.
Canada	122	Specific indicator	This indicator is attempting to get at an important element of the target, but is not well aligned. Access to food is affected more strongly by societal factors that the ability of the biosphere to produce food. Food shortages driven by a lack of local production are often related to weather events and conflict. The ideal indicator would be the number of people subject to food insecurity due to ecosystem degradation. Acknowledging that detailed data are unlikely to exist, proxies might include measures like a count of countries experiencing urban migration due to loss of agricultural productivity/wild food sources, or more broadly, loss of access to traditional food	The indicator is a proposed SDG indicator. It is unclear if the indicators suggested in the comment currently exist or are being developed. No change to the proposed list of indicators has been made.

Reviewer	Row Number	Heading	Review Comment	Response
			sources.	
Canada	123	Specific indicator	This indicator will most often measure grey infrastructure. Even in cases where ecosystems provide significant purification of water, additional treatment is often needed to remove natural pathogens. As such, the information in the indicator does not align sufficiently with the target. A better measure would assess the proportion of the population using managed drinking water that has included in its management plan the use of green infrastructure.	The indicator is a proposed SDG indicator. It has been retained pending the outcomes of the 47th Session of the United Nations Statistical Commission. No change to the proposed list of indicators has been made.
Canada	124	Generic indicator	Measuring resilience directly is neither ethical nor feasible; a reasonable proxy may be the monitoring the population status of species that are key to ecosystem function, for selected systems. LPI methodology could be used.	Noted - No change to the proposed list of indicators has been made.
Canada	125	Specific indicator	It is not clear what this will add to the forest indicator already included under Target 5 (row 30). It risks placing undue emphasis on forest, neglecting important roles of wetland and marine carbon storage. A more comprehensive terrestrial indicator exists (here). Because the intention is to model change directly, sensitivity may be sufficient to track target progress.	The status of the suggested indicator is not clear. The map appears to date from 2009. It is not clear if the indicator is still being developed. No change has been made to the proposed list of indicators.
Canada	126	Availability	This could be tracked as changes in atmospheric CO2, after accounting for the effects of fossil fuel burning. Appropriate models exist.	The indicator has been removed as it is not clear if the indicator currently exists or is being actively developed.
Canada	127	Specific Indicator	Assuming the indicator posted by GEO (notably missing from the related AHTEG INF doc), the indicator appears to have a good approach to a complex topic, but more detail is required for comprehensive review. Regarding the use of RUE as an element, indicator providers should consider the STAP report on use of NDVI.	The indicator is noted as being under active development and more information to allow for an assessment of the indicator will be available once the indicator is operational. No change to the proposed list of indicators has been made.
Canada	128	Specific indicator	The Nagoya Protocol does not require Parties to impose access restrictions on their genetic	The limitations of the indicator should be acknowledged when the indicator is used. The

Reviewer	Row Number	Heading	Review Comment	Response
			resources and a country could be fully compliant with the requirements of the Protocol without issuing a single permit for access. The indicator therefore gives at best an incomplete reading of implementation. It may be more appropriate to track the number of Parties that have implemented legislative, administrative or policy measures to meet the obligations of the Protocol.	indicator is attempting to address the second part of the target (the Protocol is operational) and has been retained. The indicator suggested in the comment has also been added.
Canada	131	Specific Indicator	This should include some measure of the degree of implementation – perhaps the degree of required financing that is in place, supported by data reported for Target 20.	The indicator has been removed in light of the documentation prepared for the 47th Session of the United Nations Statistical Commission.
Canada	132	Specific Indicator	This indicator does not appear to be aligned with the target. Rather, the indicator should assess the proportion of traditional territory held by members of ILCs, by type of tenure. Ideally the indicator would be complemented by some measure of equality among tenure holders.  For assessing impact on biodiversity, the proportion of production land managed following traditional practices might be a better indicator	The indicator is a proposed SDG indicator; in the absence of indicators more tailored to this Aichi Target the indicator has been retained. No change to the proposed list of indicators.
Canada	133	Availability	Could sufficient information be gathered from national census data to at least provide a partial indicator? Of the listed indicators for this target, this is the one that seems most promising – it is measurable at least in theory, and it is clearly linked to the desired outcomes.  UNEP/CBD/WG8J/8/9 noted that in 2013 information did not exist but that ILCs had expressed interest in taking the matter forward. UNEP/CBD/WG8J/9/INF/3 and the Guatamala workshop report provided to the AHTEG contain relevant material.	It is not clear if the proposed indicator currently exists or if it is being actively developed. No change to the proposed list of indicators has been made.
Canada	135	Specific Indicator	Linguistic indicators measure the wrong thing and should be replaced in the medium term.	The indicator, like many, has limitations. It the absence of additional indicators more directly

Reviewer	Row Number	Heading	Review Comment	Response
			While the preservation of languages is intrinsically worthy, it does not address the preservation of biological knowledge (for example, a relocated community may retain its language but is not likely to retain deep knowledge of biodiversity that is no longer local), and, of greater concern, it completely devalues the knowledge held by indigenous and local communities that do not have or no longer have a distinct language.	related to monitoring progress towards this target, the indicator has been retained. Its limitations should be acknowledged when the indicator is used. No change to the proposed list of indicators has been made.
			The ILD is a diversity-type index, affected by both language number and relative number of speakers. Because the global number of languages cannot realistically increase, the index can only be improved by increasing the evenness of distribution. Increases in the index, therefore, can be produced if the most common indigenous language declines. Regional indices can increase if new languages arrive through immigration and become more widely spoken. As a result, changes in the indicator cannot be reliably interpreted as a measure of linguistic policy success or failure. Linking it to biodiversity policy is even more tenuous.	
Canada	140	Specific Indicator	It is unclear how this is related to biodiversity. In any case, "sustainable marine technology" is ill-defined, and the proportion of the research budget it occupies is not relevant unless changes in the overall budget are also considered. Of the SDG 14a indicators, "Growth in ocean science capacity, technology and knowledge" seems preferable.	In light of the documentation for the 47th session of the United Nations Statistical Commission, this indicator has been removed.
Canada	1, 2	Specific Indicator	Biodiversity Barometer and Google trends both have a strong Western academic perspective. In particular, they depend on the recognition of	Both indicators, like most indicators, have limitations which should be acknowledged when they are used. Both indicators have been

Reviewer	Row Number	Heading	Review Comment	Response
			technical terms. Many cultures intimately aware of the importance of biodiversity would not necessarily use that word – aboriginal communities in Canada, for example, have strong traditions that value biodiversity highly, but individuals generally refer to the importance of "the land." These indicators are fundamentally mismatched to the target, which focuses on awareness of the <i>values</i> of biodiversity, not awareness of the terminology. National or subnational indicators are more likely to be able to assess trends in a manner that is culturally and linguistically sensitive. Global level indicators should instead summarize national trends, perhaps in a qualitative way.	previously used in GBO-4. In the absence of additional indicators both have been retained in the proposed list of indicators.
Canada	105, 112	Specific Indicator	As noted on line 95, combining information for particular species into an overall index may be difficult. In this case, it could be the average proportion of the range protected.	Both indicators are under development so will need to be reviewed once they are operational. No change to the proposed list of indicators has been made.
Canada	136-139	Specific Indicator	These appear adequate to capture general trends in information sharing. Not assessed are trends in the underlying science or anything related to the science base for sustainable use. A qualitative indicator might be extracted from IPBES work with relatively little additional effort.	Noted - No change to the proposed list of indicators has been made.
Canada	3,4	Available	No source is provided. Presumably these will be aggregated from national statistics. Indicators should focus on trends, as there are different baseline levels and cultural values in different countries.	Both indicators have been removed from the list. The first indicator was a proposed SDG indicator but is not included in the most recent documentation for the 47th sessions of the Statistical Commission. It was not clear if the second indicator was available or under development.
Canada	30, 31	Specific Indicator, Communicatio n	Remote sensing products that assess only whether or not mature trees are present should not be used as simplistic indicators of changes in forest area. Forest area and area of tree cover	Both indicators, like most indicators, have limitations which should be acknowledged when they are used. Both indicators have been previously used in GBO-4 and have been

Reviewer	Row Number	Heading	Review Comment	Response
			cannot be treated as synonymous. Transient tree cover losses and gains occur naturally in many forest ecosystems, and it is important to distinguish these from permanent forest loss because the implications for biodiversity can be profoundly different. Canadian boreal forests, for example, are adapted to stand-replacing disturbances and many species depend on these to produce the necessary habitat conditions. Policy incentives that encourage countries to manage natural disturbances more intensively in order to avoid tree cover loss could, in some circumstances, pose a threat to biodiversity. To produce a usable indicator, there must be a distinction among causes of change (at least anthropogenic vs natural) and an assessment of the duration of impact (distinguishing enduring losses from transient changes).	published in numerous sources. The two indicators are also complimentary. No change has been made to the proposed list of indicators.
			Where possible, FAO should be the source for forest-related definitions, indicators and data. An international process through the FAO has established a definition of "forest" and the terminology used here should remain consistent with that definition. FAO works collaboratively with all of the worlds major C&I processes for SFM and great strides have been made to increase consistency and clarity of reporting. These efforts should be leveraged and built upon. What's more, a recent analysis by CIFOR comparing the applicability of FAO country data versus Global Forest Watch data for monitoring deforestation concluded that the FAO data more accurately describes loss of forest area for at least 79% of the worlds forest area (cf. http://blog.cifor.org/34669/can-we-trust-country-level-data-from-global-forest-	

Reviewer	Row Number	Heading	Review Comment	Response
			assessments?fnl=en)  The FAO defines 13 forest types, and without breaking it down by forest type the indicator is a bit simplistic. Excluding plantations should be considered because of the lesser degree to which they provide ecosystem services and habitat for biodiversity relative to natural forest types, but it should be noted that including forest plantations would be consistent with FAO and UNFCCC definitions of 'forest' (the FAO definition only excludes agricultural plantations, such as fruit orchards or palm oil plantations). Perhaps there is a way to accommodate both of these considerations, or, if not, will leave to the forest measurement experts to choose the best option.	
Canada	30-33	Available	The IPBES assessments may deliver indicators for other habitat types: CBD reporting should retain the flexibility to include this information as it becomes available. In particular, trends in native grassland cover are important and often overlooked	Noted - The SBSTTA 19/4 recommendation notes that the list of indicators will "be kept under review, enabling, inter alia, the future incorporation of other relevant indicators, including those developed in the context of the Sustainable Development Goals and other Conventions and processes". No change has been made to the proposed list of indicators.
Canada	32, 115	Specific Indicator	<ul> <li>Assuming this source, it appears that there is support for the level of effort needed to collect sufficient data. It is difficult to accurately identify wetlands using remotely sensed data and there is variation among years and across data products. Change assessments must be done with this in mind.</li> <li>Use of the Living Planet Index methodology carries risks, as the available data sets are far from a representative or random sample. In particular, wetlands are more likely to be monitored in areas of strong change. Without</li> </ul>	It is not clear what change is being suggested. The proposed indicator is an SDG indicator. The indicator has been updated to reflect the most recent proposal for the 47th session of the United Nations Statistical Commission.

Reviewer	Row Number	Heading	Review Comment	Response
			deep examination of the nature of contributing datasets, it is not clear that detected trends will be realistic.  What happens with treed wetlands? Do we double count them as both forests and wetlands or do we only count them once as either forest or other habitat? Counting them twice could lead to them summing to more than the total land area for the country. Counting them once means that either the reported area of forest or the reported area of wetlands for the country does not match other published data, which causes confusion  In some regions, wetlands are being converted to shallow open water – this does not count as a loss of wetland under the Ramsar definition, but it does represent a risk to biodiversity and can be tracked more readily than some other wetland changes.	
Canada	51, 52	Specific Indicator	These indicators cannot be assessed until definitions of "conservation agriculture" and "sustainable agricultural practices" are agreed. Both, as described by the FAO, have guiding principles, but these principles do not lead to a measurable area. Binary classifications (sustainable/non sustainable) may be inappropriate.	The first indicator has been developed. FAO Stat has data and a trend line. The indicator has been previously used in GBO-4. The second indicator is a proposed SDG indicator. The wording of the indicator has been updated to reflect the most recent documentation for the 47th session of the United Nations Statistical Commission. No change to the proposed list of indicators has been made.
Canada	54, 55		A noted for rows 40 and 50, certification reflects market demands (linked to Target 1) and the ability of operations to support the costs of certification. A link between certification and environmental or socioeconomic outcomes has not been demonstrated; see the STAP analysis.  Whether or not a company seeks or obtains certification is not within government control; it	The first indicator has been removed as it is not clear if the indicators exists or is currently being developed. The second indicator, like many, has limitations which should be acknowledged when the indicator is used. No change to the proposed list of indicators has been made.

Reviewer	Row Number	Heading	Review Comment	Response
			is a market decision. So this indicator does not actually measure something that is within any government's mandate to control.	
Canada	59-63	Specific Indicator	Trends in pollutants should include trends in mercury emissions and trends in mercury in fish. These trends are monitored by many nations and this information was recently compiled by UNEP http://www.unep.org/PDF/PressReleases/Global MercuryAssessment2013.pdf  Another useful indicator might be the number of lakes or species with mercury levels in fish that exceed recommended limits for consumption by humans or piscivorous birds and mammals.	Trends in mercury emissions have been added to the proposed list of indicators. From the reference publication it is not clear if the indicator mercury in fish is currently available or being developed at a global level. Similarly it is not clear if the indicator related to lakes or species that exceed recommended limits is available or under development.
Canada	66-68	Specific Indicator	I am surprised by the lack of at least one phosphorus indicator; at least one of these could be extended.  These could potentially be collapsed into one "excess N" indicator, providing some balance with coverage of other pollution issues.	It is not clear if the proposed indicator exists or is being developed. No change to the proposed list of indicators has been made.  Regarding collapsing the excess Nitrogen indicator, the proposed change is not clear. No change to the proposed list of indicators has been made.
Canada	74, 78	Specific Indicator	These reflect the same underlying work and should be combined. They are aligned with the generic indicator on row 78.  They do not measure the outcome. I suggest this indicator (trends in implementation of policy responses) is relatively easy to communicate (though not identified with an "X" as such, in that it actually represents "actions taken by regulatory bodies / governments. Experience suggests actions taken (assuming they exist), are a communication priority for governments, so as to indicate engagement. Similarly, disaggregation or roll up should be relatively	The indicators have been merged and the wording of the indicator has been updated to reflect the documentation prepared for the 47th session of the United Nations Statistic Commission.

Reviewer	Row Number	Heading	Review Comment	Response
			simple, based on category of regulation (Phytosanitary? Customs?) or policy instrument-type. Regulatory bodies are far more accustomed to dealing with this type of information then they are to dealing with biological data – the indicator actually intersects with the strongest capacity area of regulatory agencies and governments.	
Canada	88 - 90	Specific Indicator	Should extend to include other effective areabased conservation measures.	Noted - No change to the proposed list of indicators has been made.
Canada	89, 90	Specific Indicator	These appear to be the same indicator. It is also suggested to replace "area" with "territory".  Sufficient data may exist to report coastal, shelf and deep sea areas separately. Given recent evidence that limiting resource extraction is key to effectiveness of MPAs, the proportion that is "no take" would be a useful complementary indicator.	The wording for the proposed SDG reflects the documentation for the 47th session of the United Nations Statistic Commission. The word "area" has been retained as this is the usual wording under the Convention. No change to the proposed list of indicators has been made.
Canada	94, 96	Specific indicator	These indicators are both trying to measure the same thing, so only one should be selected. Insufficient information is available for PARI to assess its quality.	The indicators measure similar things but use different methodologies/data sets. Retaining both would allow for a more robust assessment of progress/change. No change to the proposed list of indicators has been made.
Canada	95, 96	Specific Indicator	This is an effective way to leverage existing information. Rolling up information on many species to provide a global indicator may provide a challenge for the SPI. Using a selected group of species may allow detection of trends over time – for example, the species included in the sampled Red List Index is an option.	It is not clear if a change is being suggested. No change has been made to the proposed list of indicators.
Canada		Specific Indicator	The number of incentives should be removed from the indicator. Assessing the number of incentives would require that we "count" incentives somehow, which raises difficult methodological issues. For example, if country A has three subsidy programs and merges them into	The specific indicator has been removed from the proposed list of indicators.

Reviewer	Row Number	Heading	Review Comment	Response
			one program that provides the same value of subsidy, does that mean they've "reduced" incentives? If country B provides the same value of subsidy through 10 programs as country A does with one program, does this mean that country B is providing more subsidies? Counting incentives provides little or no additional information and should be removed from the indicators, while retaining a focus on value.  Second, the value used should account for the size of the sector(s) to which the incentives/subsidies are available, as this is important for interpreting incentives in at least two respects. First, a given amount of subsidy will have a much larger effect if given to a small sector. Second, decreases in the value of a subsidy over time may reflect elimination or phasing out, but may also reflect a shrinking of	
			<ul> <li>the sector itself.</li> <li>What is the scope of incentives and subsidies to be included? Does it include direct transfer programs, general services provided by governments, etc? Or might it include legislation and regulations that provide incentives?</li> <li>Guidance must be provided around how to assess whether an incentive or subsidy is harmful</li> </ul>	
China	0	Available today (X) or	to biodiversity. For example, in the case of fisheries, account should be taken of fisheries management, which can mitigate the potential negative impacts of subsidies and other incentives.  It is better to focus on the indicators available today. Indicators under development are not	Only indicators which are currently available or under active development (will become available

Reviewer	Row Number	Heading	Review Comment	Response
		under active development (Y)	suggested to be included in this list since it is not feasible to check whether they are operational or not. This list can be kept under review. New indicators could be incorporated into the list when they are ready to use in the future. Proposed change: Delete all the indicators under active development.	in the coming months) have been included in the proposed list. One exception to this are the SDG indicators which are currently being discussed in another forum. Indicators which are either not under active development, currently available or proposed SDG indicators have been removed from the list.
China	30	Specific Indicator	Target 5 refers to natural habitats. However, the indicator (trends in extent of forests) takes the reforestation into account as well. The biodiversity of the artificial forests is usually low. This indicator should be modified.	The term "tree cover" has been added to the indicator to make it clear that the indicator does not necessarily refer to native forests and that reforestation would be included. When this is used (as was done in GBO-4) this nuance should be acknowledge. Given that the indicator exists, that it has been published and was used in GBO-4, it has been retained in the proposed list.
China	31	Specific Indicator	Target 5 refers to natural habitats. However, the indicator (forest area as a percentage of total land area) takes the reforestation into account as well. Usually, the biodiversity is low in the artificial forests. This indicator should be modified.	The indicator is currently being proposed as part of the SDG process. For this reason it has been retained.
China	39	Specific Indicator	What is the difference between Species Habitat Index and Biodiversity Habitat Index? Explanation needed.	The difference between the two indicators is presented in this document http://www.geobon.org/Downloads/brochures/20 15/GBCI_Version1.2_low.pdf. As per the SBSTTA recommendation additional guidance on each of the indicators in the proposed list will be developed.
China	59	Specific Indicator	The emission of COD and solid wastes should also be monitored since they are two important kinds of main pollutants and will lead to negative impacts on biodiversity. Proposed change: change 'Trends in Emission NOX, SOX, POPS' to 'Trends in Emission COD, NOX, SOX, POPS, Solid Wastes'	The indicator has been divided into several indicators. Separate indicators for NOX, SOX and POPs have been added. Indicators for COD and solid waste have not been included. It is not clear what organization is developing the indicator and if data is available. Also the link between solid waste and biodiversity is also not clear.
China	60	Specific	The use of chemical should also be monitored	The indicator has been retained as pesticide use

Reviewer	Row Number	Heading	Review Comment	Response
		Indicator	since it will also lead to negative impact on biodiversity. Proposed change: Change 'Trends in Pesticide Use' To 'Trends in Pesticide and Chemical Use'	as this is the formulation used by FAO (http://faostat3.fao.org/browse/R/RP/E). Regarding chemicals, it is not clear who or which organization is collection this information globally and/or has developed an indicator. Given this no change to the proposed indicator made.
China	77	General Indicator	Another specific indicator could be used for this general indicator (Trends in the numbers of invasive alien species introduction and establishment events). Proposed change: Add 'Trends in the number and frequency of harmful species intercepted by customs and port authorities' as another specific indicator for this general indicator.	From the submission it is not clear who is developing this indicator and/or if datasets exists. No change has been made to the proposed list of indicators.
China	84	Specific Indicator	Is the Climatic Impact Index for birds a new indictor? What is the definition and how to calculate? Guideline needed.	The indicator has been developed by BirdLife and its partners. It has been published here - http://journals.plos.org/plosone/article?id=10.137 1/journal.pone.0004678. Further information/guidance on the indicator could be made available as per the SBSTTA recommendation XIX/4 requesting the preparation/development of additional information and methodologies for the indicators.
China	111	Specific Indicator	Data for the Species Habitat Index (wild relatives) is unavailable currently. Lacking relative data will be an obstacle to the application.	The indicator is currently under active development. This has been reflected in the proposed list.
China	112	Specific Indicator	Data for the Species Protection Index (wild relatives) is unavailable currently. Lacking relative data will be an obstacle to the application.	The indicator is currently under active development. This has been reflected in the proposed list.
China	119	General Indicator	There are two more specific indicators for this general indicator (Trends in benefits from ecosystem services). The value of ecosystem	It is not clear if the indicator exists and/or who is preparing it or collecting the necessary information. It is also not clear how the

Reviewer	Row Number	Heading	Review Comment	Response
			services is the main component of the GDP of the poor. The wellbeing of the poor relies on the ecosystem services. Proposed change: Add 'Net income per capita of rural households' and 'Number of people in poverty' as another two specific indicators for this general indicator.	indicators relate to biodiversity. The indicators have not been added.
China	127	Specific Indicator	Global data for the calculation of global ecosystem restoration index are not complete. This indicator is not operational at global level.	The indicator is currently under active development. This has been reflected in the proposed list.
China	136	General Indicator	Target 19 refers to the improvement, sharing, transfer and application of knowledge, the science base and technologies. The general indicator 'Number of maintained species inventories being used to implement the Convention' only reflects one part of Target 19. Proposed change: Some other specific indicators related to Target 19, for instance, trends in academic papers related to biodiversity, could be added here.	It is not clear what additional indicators could be added. For the proposed indicator it is not clear who is currently developing the indicator or what the dataset is. No change to the proposed list of indicators has been made.
China	137	Specific Indicator	There is huge bias in GBIF. Please see Meyer, C., Kreft, H., Guralnick, R. & Jetz, W. Global priorities for an effective information basis of biodiversity distributions. Nature Communications 6:8221 (2015).	Regarding GBIF, while there may be issues in the coverage of the data, the indicator exists and it was used in GBO-4. The GBIF indicator has been retained. Most indicators in the proposed list have limitations in their use. These limitations should be acknowledged when the indicators are used.
China	141	Specific Indicator	Since the financial reporting framework is adopted by decision XII/13, some specific indicators which are ready to use could be listed. Proposed change: Add 'Biodiversity marked official development assistance' as a specific indicator.	Biodiversity marked ODA is included in the financial reporting framework, adopted by decision XII/3 which is reflected in the proposed list.  The indicator "Official development assistance and public expenditure on conservation and sustainable use of biodiversity and ecosystems" which is a proposed indicator for the SDGs has been included in the proposed list.

Reviewer	Row Number	Heading	Review Comment	Response
Conservati on Internation al	3	Source	Which source will be used to measure this and what is the rational for measuring interest in just 15-year old students?	In light of the documentation prepared for the 47 <sup>th</sup> session of the United Nations Statistical Commission, this indicator has been removed from the proposed list.
Conservati on Internation al	97	Available today (X) or under active development (Y)	X	The indicator has been included in the list under "trends in extinction risk and populations of species". In order to keep the proposed list to a manageable size, indicators have only been included once.
Conservati on Internation al	97	Easy to communicate	X	The indicator has been included in the list under "trends in extinction risk and populations of species". In order to keep the proposed list to a manageable size, indicators have only been included once.
Conservati on Internation al	97	Generic Indicator	Add one more indicator under Trends in effectiveness and/or equitability of management of protected areas.	The indicator has been included in the list under "trends in extinction risk and populations of species". In order to keep the proposed list to a manageable size, indicators have only been included once.
Conservati on Internation al	97	Global indicator can be disaggregated to create national indicator	It can be, but it is limited by the number of sites in each country. As the TEAM network expands and Wildlife Insights (federated camera trap project – TEAM, CI, Smithsonian, WCS, North Carolina Museum of Natural Sciences) is implemented the number of data sets will grow.	The indicator has been included in the list under "trends in extinction risk and populations of species". In order to keep the proposed list to a manageable size, indicators have only been included once.
Conservati on Internation al	97	National data are aggregated to form global indicator	Can be, but the minimum spatial unit is of aggregation is local data (at the level of a protected area or site).	The indicator has been included in the list under "trends in extinction risk and populations of species". In order to keep the proposed list to a manageable size, indicators have only been included once.
Conservati on Internation al	97	Source	Tropical Ecology Assessment and Monitoring (TEAM) Network	The indicator has been included in the list under "trends in extinction risk and populations of species". In order to keep the proposed list to a manageable size, indicators have only been included once.

Reviewer	Row Number	Heading	Review Comment	Response
Conservati on Internation al	97	Specific Indicator	The Wildlife Picture Index (disaggregated by protected area): When calculated at the scale of a protected area, the WPI can measure the effectiveness of protected areas as actual conservation outcomes because its measures trends in biodiversity through time.	The indicator has been included in the list under "trends in extinction risk and populations of species". In order to keep the proposed list to a manageable size, indicators have only been included once.
Conservati on Internation al	97	Used in GBO3/GBO4	No	The indicator has been included in the list under "trends in extinction risk and populations of species". In order to keep the proposed list to a manageable size, indicators have only been included once.
Conservati on Internation al	107	Available today (X) or under active development (Y)	X	Change made
Conservati on Internation al	107	Easy to communicate	X	Change made
Conservati on Internation al	107	Generic Indicator	Add one more indicator under Trends in extinction risk and populations of species	Given that the indicator is available and has been published and is reflected in the Biodiversity Indicators Partnership, the indicator has been added to the proposed list.
Conservati on Internation al	107	Global indicator can be disaggregated to create national indicator	It can be, but currently limited by the number of sites in each country. As the TEAM network expands and Wildlife Insights (federated camera trap project – TEAM, CI, Smithsonian, WCS, North Carolina Museum of Natural Sciences) is implemented the number of data sets will grow.	As the data set is currently limited, the indicator has not been noted as being disaggregated to national level. No change made
Conservati on Internation al	107	National data are aggregated to form global indicator	Can be, but the minimum spatial unit of aggregation is local data (at the level of a protected area or site).	As the data set is currently limited, the indicator has not been noted as being disaggregated to national level. No change made
Conservati	107	Source	Tropical Ecology Assessment and Monitoring	Change made

Reviewer	Row Number	Heading	Review Comment	Response
on Internation al			(TEAM) Network	
Conservati on Internation al	107	Specific Indicator	The Wildlife Picture Index: This is the only index included within the BIP that uses in situ primary data to monitor populations of ground-dwelling mammals and birds in tropical forests (see Beaudrot et al., 2016, O'Brien et al. 2008). It fills an important geographic gap for tropical forests globally and covers a critical group of species (about 300 between mammals and birds). It is also updated in near-real time (within months of data collection)	Given that the indicator is available and has been published and is reflected in the Biodiversity Indicators Partnership, the indicator has been added to the proposed list.
Conservati on Internation al	107	Used in GBO3/GBO4	Included in Appendixes of GBO4.	Change made
Division for Ocean Affairs and the Law of the Sea	3	Row 8	Relevant sources of information are also contained in publications and documents, such as the first global integrated marine assessment, as well as the reports of the Secretary-General on oceans and the law of the sea and on sustainable fisheries.	It is not clear what change is being suggested. No changes have been made to the proposed list of indicators.
Division for Ocean Affairs and the Law of the Sea	7	Row 46	We wish to note that the indicator proposal for SDG target 14.6 has been grouped as "grey" by the IAEG-SDGs and the consultation of the IAEG-SDGs on this indicator is currently being conducted.	The list of indicators has been updated to reflect the documentation for the 47th sessions of the United Nations Statistical Commission
Division for Ocean Affairs and the Law of the Sea	8	Row 49	We wish to note that the indicator proposals for SDG target 14.b have been grouped as "grey" by the IAEG-SDGs and the consultation of the IAEG-SDGs on this indicator is currently being conducted.	The list of indicators has been updated to reflect the documentation for the 47th sessions of the United Nations Statistical Commission
Division for Ocean Affairs and	9	Row 62	We wish to note that indicator proposal for SDG target 14.1 has been grouped as "grey" by the IAEG-SDGs and the consultation of the IAEG-	The list of indicators has been updated to reflect the documentation for the 47th sessions of the United Nations Statistical Commission.

Reviewer	Row Number	Heading	Review Comment	Response
the Law of the Sea			SDGs on this indicator is currently being conducted.	
Division for Ocean Affairs and the Law of the Sea	10	Row 74	Relevant sources of information are also contained in publications and documents, such as the first global integrated marine assessment, Law of the Sea Bulletins as well as the reports of the Secretary-General on oceans and the law of the sea and on sustainable fisheries.	It is not clear what indicator is being proposed or if an indicator exists. No changes have been made to the proposed list of indicators.
Division for Ocean Affairs and the Law of the Sea	11	Row 78	Relevant sources of information are also contained in publications and documents, such as the first global integrated marine assessment, Law of the Sea Bulletins as well as the reports of the Secretary-General on oceans and the law of the sea and on sustainable fisheries.	It is not clear what indicator is being proposed or if an indicator exists. No changes have been made to the proposed list of indicators.
Division for Ocean Affairs and the Law of the Sea	12	Row 82	Indicator could read "Number of policies, legislation and programmes addressing pressures on coral reefs".	It is not clear if this indicator currently exists or is under development. It is also not clear if data is available. No change to the proposed list of indicators has been made.
Division for Ocean Affairs and the Law of the Sea	12	Row 87	Indicator could read "Numbers of policies, legislation and programmes addressing vulnerable ecosystems impacted by climate change or ocean acidification".	It is not clear if this indicator currently exists or is under development. It is also not clear if data is available. No change to the proposed list of indicators has been made.
Division for Ocean Affairs and the Law of the Sea	13	Rows 89, 97	Relevant sources of information are also contained in publications and documents, such as the first global integrated marine assessment, Law of the Sea Bulletins as well as the reports of the Secretary-General on oceans and the law of the sea and on sustainable fisheries.	It is not clear what indicator is being proposed or if an indicator exists. No changes have been made to the proposed list of indicators.
Division for Ocean Affairs and the Law of the Sea	7 to 8	Rows 41, 45, 47, 49	Relevant sources of information are also contained in publications and documents, such as the first global integrated marine assessment, as well as the reports of the Secretary-General on oceans and the law of the sea and on sustainable fisheries.	It is not clear what change is being suggested. No changes have been made to the proposed list of indicators.

Reviewer	Row Number	Heading	Review Comment	Response
Division for Ocean Affairs and the Law of the Sea			Relevant sources of information may be contained in publications and documents, such as the first global integrated marine assessment, Law of the Sea Bulletins as well as the reports of the Secretary-General on oceans and the law of the sea and on sustainable fisheries.	It is not clear what indicator is being proposed or if an indicator exists. No changes have been made to the proposed list of indicators.
EU-JRC	71	Available today (X) or under active development (Y)	X	The proposed indicator currently focuses on the Mediterranean environment. As such the indicator is not global in its scope. It is not clear if there are plans to expand the indicator to the global level. No change has been made to the proposed indicator list.
EU-JRC	71	Easy to communicate	X	The proposed indicator currently focuses on the Mediterranean environment. As such the indicator is not global in its scope. It is not clear if there are plans to expand the indicator to the global level. No change has been made to the proposed indicator list.
EU-JRC	71	Global indicator can be disaggregated to create national indicator	X	The proposed indicator currently focuses on the Mediterranean environment. As such the indicator is not global in its scope. It is not clear if there are plans to expand the indicator to the global level. No change has been made to the proposed indicator list.
EU-JRC	71	National data are aggregated to form global indicator	X	The proposed indicator currently focuses on the Mediterranean environment. As such the indicator is not global in its scope. It is not clear if there are plans to expand the indicator to the global level. No change has been made to the proposed indicator list.
EU-JRC	71	Source	Katsanevakis, S., Tempera, F. Teixeira, H. (2016) Mapping the impact of alien species on marine ecosystems: the Mediterranean Sea case study. Accepted in Diversity and Distributions.	The proposed indicator currently focuses on the Mediterranean environment. As such the indicator is not global in its scope. It is not clear if there are plans to expand the indicator to the global level. No change has been made to the

Reviewer	Row Number	Heading	Review Comment	Response
	T (umser		We propose a new indicator to fill the gap "No specific indicators identified" in the Generic Indicator "Trends in identification and prioritization of IAS".	proposed indicator list.
			The new indicator: Cumulative IMPact of Invasive Alien species - CIMPAL index; was recently developed by Katsanevakis et al. (in press at Diversity and Distributions) for mapping the impact of invasive alien species and its application has been demonstrated for marine ecosystems, in the Mediterranean Sea.	
EU-JRC	71	Specific Indicator	The CIMPAL index allows measuring and mapping cumulative impacts of invasive alien species (IAS), providing a universal framework that can be applied to different ecosystems (i.e. both terrestrial and marine environments). It is useful for the prioritization of invasive species as directly requested by AICHI Target 9 (providing rankings of invasive aliens), and allows following temporal and spatial trends on their impacts. In addition, such trends can be easily linked to pathways of introduction. The index can be calculated for the whole regional sea, but also at the country level or habitat level, depending on the objectives and data resolution available.	The proposed indicator currently focuses on the Mediterranean environment. As such the indicator is not global in its scope. It is not clear if there are plans to expand the indicator to the global level. No change has been made to the proposed indicator list.
			To calculate this indicator we can rely on open access datasets regarding IAS distribution (as for example the EASIN - European Alien Species Information Network, hosted by European Commission JRC and used in our example for the Mediterranean), as well as in literature information on the impacts of IAS impacts on	

Reviewer	Row Number	Heading	Review Comment	Response
			biodiversity.	
EU-JRC	76	Available today (X) or under active development (Y)	X	The proposed indicator currently focuses on the Mediterranean environment. As such the indicator is not global in its scope. It is not clear if there are plans to expand the indicator to the global level. No change has been made to the proposed indicator list.
EU-JRC	76	Easy to communicate	X	The proposed indicator currently focuses on the Mediterranean environment. As such the indicator is not global in its scope. It is not clear if there are plans to expand the indicator to the global level. No change has been made to the proposed indicator list.
EU-JRC	76	Global indicator can be disaggregated to create national indicator	X	The proposed indicator currently focuses on the Mediterranean environment. As such the indicator is not global in its scope. It is not clear if there are plans to expand the indicator to the global level. No change has been made to the proposed indicator list.
EU-JRC	76	National data are aggregated to form global indicator	X	The proposed indicator currently focuses on the Mediterranean environment. As such the indicator is not global in its scope. It is not clear if there are plans to expand the indicator to the global level. No change has been made to the proposed indicator list.
EU-JRC	76	Source	Katsanevakis, S., Tempera, F. Teixeira, H. (2016) Mapping the impact of alien species on marine ecosystems: the Mediterranean Sea case study. Accepted in Diversity and Distributions.	The proposed indicator currently focuses on the Mediterranean environment. As such the indicator is not global in its scope. It is not clear if there are plans to expand the indicator to the global level. No change has been made to the proposed indicator list.
EU-JRC	76	Specific Indicator	We propose a new indicator to fill the gap "No specific indicators identified" in the Generic Indicator "Trends in impacts of IAS on ecosystems".	The proposed indicator currently focuses on the Mediterranean environment. As such the indicator is not global in its scope. It is not clear if there are plans to expand the indicator to the

Reviewer	Row Number	Heading	Review Comment	Response
			The new indicator: Cumulative IMPact of Invasive Alien species - CIMPAL index; was recently developed by Katsanevakis et al. (in press at Diversity and Distributions) for mapping the impact of invasive alien species and its application has been demonstrated for marine ecosystems, in the Mediterranean Sea.  The CIMPAL index allows measuring and mapping cumulative impacts of invasive alien species (IAS), providing a universal framework that can be applied to different ecosystems (i.e. both terrestrial and marine environments). It is useful for the prioritization of invasive species as directly requested by AICHI Target 9 (providing rankings of invasive aliens), and allows following temporal and spatial trends on their impacts. In addition, such trends can be easily linked to pathways of introduction. The index can be calculated for the whole regional sea, but also at the country level or habitat level, depending on the objectives and data resolution available.  To calculate this indicator we can rely on open access datasets regarding IAS distribution (as for example the EASIN - European Alien Species Information Network, hosted by European Commission JRC and used in our example for the Mediterranean), as well as in literature information on the impacts of IAS impacts on biodiversity.	global level. No change has been made to the proposed indicator list.
European Union	3	Specific indicator	In the 'Results of the list of indicators reviewed at the second IAEG-SDG meeting' it is 'grey' which means 'Indicators where it appears that more indepth discussion is still needed and/or	In the documentation prepared for Forty-seventh session of the Statistical Commission, the colour coding has been removed and the list of indicators has been updated. The indicators in the

Reviewer	Row Number	Heading	Review Comment	Response
			methodological development needs to be undertaken'. So it may be added (proposed grey indicator for SDG target 4.7)	proposed list of indicators have been updated to reflect the most recent document from this process. However further changes may be required in light of the ongoing discussions on this issue. Given the ongoing nature of the discussions the indicator criteria included in the table have been left blank for the time being. A column has also been added to the proposed list of indicators for the Strategic Plan to indicate if the indicator is a proposed SDG indicator.
European Union	7	Available	delete X ( <del>X)</del>	In the documentation prepared for Forty-seventh session of the Statistical Commission, the colour coding has been removed and the list of indicators has been updated. The indicators in the proposed list of indicators have been updated to reflect the most recent document from this process. However further changes may be required in light of the ongoing discussions on this issue. Given the ongoing nature of the discussions the indicator criteria included in the table have been left blank for the time being. A column has also been added to the proposed list of indicators for the Strategic Plan to indicate if the indicator is a proposed SDG indicator.
European Union	7	Specific indicator	In the 'Results of the list of indicators reviewed at the second IAEG-SDG meeting' it is 'grey' which means 'Indicators where it appears that more indepth discussion is still needed and/or methodological development needs to be undertaken'. So it may be added (proposed grey indicator for SDG target 15.9)	In the documentation prepared for Forty-seventh session of the Statistical Commission, the colour coding has been removed and the list of indicators has been updated. The indicators in the proposed list of indicators have been updated to reflect the most recent document from this process. However further changes may be required in light of the ongoing discussions on this issue. Given the ongoing nature of the discussions the indicator criteria included in the table have been left blank for the time being. A column has also been added to the proposed list

Reviewer	Row Number	Heading	Review Comment	Response
				of indicators for the Strategic Plan to indicate if the indicator is a proposed SDG indicator.
European Union	11	Available	Add X	In the documentation prepared for Forty-seventh session of the Statistical Commission, the colour coding has been removed and the list of indicators has been updated. The indicators in the proposed list of indicators have been updated to reflect the most recent document from this process. However further changes may be required in light of the ongoing discussions on this issue. Given the ongoing nature of the discussions the indicator criteria included in the table have been left blank for the time being. A column has also been added to the proposed list of indicators for the Strategic Plan to indicate if the indicator is a proposed SDG indicator.
European Union	11	Specific indicator	In the 'Results of the list of indicators reviewed at the second IAEG-SDG meeting' it is 'green' which means 'Indicators for which there is general agreement (or small modifications proposed), based on the fact that less than 25% of respondents have strong concerns/expressed need to discuss on priority basis; no strong opposing views by members; furthermore, some of these indicators are already well established;' . So it may be added (proposed green indicator for SDG target 15.9)	In the documentation prepared for Forty-seventh session of the Statistical Commission, the colour coding has been removed and the list of indicators has been updated. The indicators in the proposed list of indicators have been updated to reflect the most recent document from this process. However further changes may be required in light of the ongoing discussions on this issue. Given the ongoing nature of the discussions the indicator criteria included in the table have been left blank for the time being. A column has also been added to the proposed list of indicators for the Strategic Plan to indicate if the indicator is a proposed SDG indicator.
European Union	19	Specific indicator	In the 'Results of the list of indicators reviewed at the second IAEG-SDG meeting' it is 'grey' which means 'Indicators where it appears that more indepth discussion is still needed and/or methodological development needs to be undertaken'. So it may be added (proposed grey	In the documentation prepared for Forty-seventh session of the Statistical Commission, the colour coding has been removed and the list of indicators has been updated. The indicators in the proposed list of indicators have been updated to reflect the most recent document from this

Reviewer	Row Number	Heading	Review Comment	Response
			indicator for SDG target 15.7)	process. However further changes may be required in light of the ongoing discussions on this issue. Given the ongoing nature of the discussions the indicator criteria included in the table have been left blank for the time being. A column has also been added to the proposed list of indicators for the Strategic Plan to indicate if the indicator is a proposed SDG indicator.
European Union	21	Specific indicator	In the 'Results of the list of indicators reviewed at the second IAEG-SDG meeting' it is 'grey' which means 'Indicators where it appears that more indepth discussion is still needed and/or methodological development needs to be undertaken'. So it may be added (proposed grey indicator for SDG target 8.4)	In the documentation prepared for Forty-seventh session of the Statistical Commission, the colour coding has been removed and the list of indicators has been updated. The indicators in the proposed list of indicators have been updated to reflect the most recent document from this process. However further changes may be required in light of the ongoing discussions on this issue. Given the ongoing nature of the discussions the indicator criteria included in the table have been left blank for the time being. A column has also been added to the proposed list of indicators for the Strategic Plan to indicate if the indicator is a proposed SDG indicator.
European Union	22	Available	Add X	In the documentation prepared for Forty-seventh session of the Statistical Commission, the colour coding has been removed and the list of indicators has been updated. The indicators in the proposed list of indicators have been updated to reflect the most recent document from this process. However further changes may be required in light of the ongoing discussions on this issue. Given the ongoing nature of the discussions the indicator criteria included in the table have been left blank for the time being. A column has also been added to the proposed list of indicators for the Strategic Plan to indicate if the indicator is a proposed SDG indicator.

Reviewer	Row Number	Heading	Review Comment	Response
European Union	22	Specific indicator	In the 'Results of the list of indicators reviewed at the second IAEG-SDG meeting' it is 'green' which means 'Indicators for which there is general agreement (or small modifications proposed), based on the fact that less than 25% of respondents have strong concerns/expressed need to discuss on priority basis; no strong opposing views by members; furthermore, some of these indicators are already well established;' . So it may be added (proposed green indicator for SDG target 12.1)	In the documentation prepared for Forty-seventh session of the Statistical Commission, the colour coding has been removed and the list of indicators has been updated. The indicators in the proposed list of indicators have been updated to reflect the most recent document from this process. However further changes may be required in light of the ongoing discussions on this issue. Given the ongoing nature of the discussions the indicator criteria included in the table have been left blank for the time being. A column has also been added to the proposed list of indicators for the Strategic Plan to indicate if the indicator is a proposed SDG indicator.
European Union	23	Specific indicator	In the 'Results of the list of indicators reviewed at the second IAEG-SDG meeting' it is 'grey' which means 'Indicators where it appears that more indepth discussion is still needed and/or methodological development needs to be undertaken'. So it may be added (proposed grey indicator for SDG target 12.1)	In the documentation prepared for Forty-seventh session of the Statistical Commission, the colour coding has been removed and the list of indicators has been updated. The indicators in the proposed list of indicators have been updated to reflect the most recent document from this process. However further changes may be required in light of the ongoing discussions on this issue. Given the ongoing nature of the discussions the indicator criteria included in the table have been left blank for the time being. A column has also been added to the proposed list of indicators for the Strategic Plan to indicate if the indicator is a proposed SDG indicator.
European Union	26	Specific indicator	In the 'Results of the list of indicators reviewed at the second IAEG-SDG meeting' it is 'grey' which means 'Indicators where it appears that more indepth discussion is still needed and/or methodological development needs to be undertaken'. So it may be added (proposed grey indicator for SDG target 6.4)	In the documentation prepared for Forty-seventh session of the Statistical Commission, the colour coding has been removed and the list of indicators has been updated. The indicators in the proposed list of indicators have been updated to reflect the most recent document from this process. However further changes may be required in light of the ongoing discussions on

Reviewer	Row Number	Heading	Review Comment	Response
				this issue. Given the ongoing nature of the discussions the indicator criteria included in the table have been left blank for the time being. A column has also been added to the proposed list of indicators for the Strategic Plan to indicate if the indicator is a proposed SDG indicator.
European Union	28	Available	Don't add X because there is a comment re. further research	In the documentation prepared for Forty-seventh session of the Statistical Commission, the colour coding has been removed and the list of indicators has been updated. The indicators in the proposed list of indicators have been updated to reflect the most recent document from this process. However further changes may be required in light of the ongoing discussions on this issue. Given the ongoing nature of the discussions the indicator criteria included in the table have been left blank for the time being. A column has also been added to the proposed list of indicators for the Strategic Plan to indicate if the indicator is a proposed SDG indicator.
European Union	28	Specific indicator	In the 'Results of the list of indicators reviewed at the second IAEG-SDG meeting' it is 'green' which means 'Indicators for which there is general agreement (or small modifications proposed), based on the fact that less than 25% of respondents have strong concerns/expressed need to discuss on priority basis; no strong opposing views by members; furthermore, some of these indicators are already well established;' So it may be added (proposed green indicator for SDG target 11.3)	In the documentation prepared for Forty-seventh session of the Statistical Commission, the colour coding has been removed and the list of indicators has been updated. The indicators in the proposed list of indicators have been updated to reflect the most recent document from this process. However further changes may be required in light of the ongoing discussions on this issue. Given the ongoing nature of the discussions the indicator criteria included in the table have been left blank for the time being. A column has also been added to the proposed list of indicators for the Strategic Plan to indicate if the indicator is a proposed SDG indicator.
European Union	31	Available	delete X ( <del>X)</del>	In the documentation prepared for Forty-seventh session of the Statistical Commission, the color

Reviewer	Row Number	Heading	Review Comment	Response
				coding has been removed and the list of indicators has been updated. The indicators in the proposed list of indicators have been updated to reflect the most recent document from this process. However further changes may be required in light of the ongoing discussions on this issue. Given the ongoing nature of the discussions the indicator criteria included in the table have been left blank for the time being. A column has also been added to the proposed list of indicators for the Strategic Plan to indicate if the indicator is a proposed SDG indicator.
European Union	31	Specific indicator	In the 'Results of the list of indicators reviewed at the second IAEG-SDG meeting' it is 'grey' which means 'Indicators where it appears that more indepth discussion is still needed and/or methodological development needs to be undertaken' . So it may be added (proposed grey indicator for SDG target 15.1)	In the documentation prepared for Forty-seventh session of the Statistical Commission, the colour coding has been removed and the list of indicators has been updated. The indicators in the proposed list of indicators have been updated to reflect the most recent document from this process. However further changes may be required in light of the ongoing discussions on this issue. Given the ongoing nature of the discussions the indicator criteria included in the table have been left blank for the time being. A column has also been added to the proposed list of indicators for the Strategic Plan to indicate if the indicator is a proposed SDG indicator.
European Union	32	Specific indicator	The name of the SDG indicator is not correct:  "Percentage of changes in wetlands extent over time fresh water ecosystems (proposed indicator for SDG target 6.6)" In the 'Results of the list of indicators reviewed at the second IAEG-SDG meeting' it is 'green' which means 'Indicators for which there is general agreement (or small modifications proposed), based on the fact that less than 25% of respondents have strong concerns/expressed need to discuss on priority	In the documentation prepared for Forty-seventh session of the Statistical Commission, the colour coding has been removed and the list of indicators has been updated. The indicators in the proposed list of indicators have been updated to reflect the most recent document from this process. However further changes may be required in light of the ongoing discussions on this issue. Given the ongoing nature of the discussions the indicator criteria included in the

Reviewer	Row Number	Heading	Review Comment	Response
			basis; no strong opposing views by members; furthermore, some of these indicators are already well established;' So it may be added (proposed green indicator for SDG target 11.3)	table have been left blank for the time being. A column has also been added to the proposed list of indicators for the Strategic Plan to indicate if the indicator is a proposed SDG indicator.
European Union	36	Available	What does Y mean? It should be X	Y indicates that the indicator is under active developed and not currently available.  In the documentation prepared for Forty-seventh session of the Statistical Commission, the colour coding has been removed and the list of indicators has been updated. The indicators in the proposed list of indicators have been updated to reflect the most recent document from this process. However further changes may be required in light of the ongoing discussions on this issue. Given the ongoing nature of the discussions the indicator criteria included in the table have been left blank for the time being. A column has also been added to the proposed list of indicators for the Strategic Plan to indicate if the indicator is a proposed SDG indicator.
European Union	36	Specific indicator	In the 'Results of the list of indicators reviewed at the second IAEG-SDG meeting' it is 'green' which means 'Indicators for which there is general agreement (or small modifications proposed), based on the fact that less than 25% of respondents have strong concerns/expressed need to discuss on priority basis; no strong opposing views by members; furthermore, some of these indicators are already well established;' So it may be added (proposed green indicator for SDG target 15.3)	In the documentation prepared for Forty-seventh session of the Statistical Commission, the colour coding has been removed and the list of indicators has been updated. The indicators in the proposed list of indicators have been updated to reflect the most recent document from this process. However further changes may be required in light of the ongoing discussions on this issue. Given the ongoing nature of the discussions the indicator criteria included in the table have been left blank for the time being. A column has also been added to the proposed list of indicators for the Strategic Plan to indicate if the indicator is a proposed SDG indicator.
European	46	Specific	In the 'Results of the list of indicators reviewed at	In the documentation prepared for Forty-sevent

Reviewer	Row Number	Heading	Review Comment	Response
Union		indicator	the second IAEG-SDG meeting' it is 'grey' which means 'Indicators where it appears that more indepth discussion is still needed and/or methodological development needs to be undertaken'. So it may be added (proposed grey indicator for SDG target 14.6)	session of the Statistical Commission, the colour coding has been removed and the list of indicators has been updated. The indicators in the proposed list of indicators have been updated to reflect the most recent document from this process. However further changes may be required in light of the ongoing discussions on this issue. Given the ongoing nature of the discussions the indicator criteria included in the table have been left blank for the time being. A column has also been added to the proposed list of indicators for the Strategic Plan to indicate if the indicator is a proposed SDG indicator.
European Union	47	Specific indicator	In the 'Results of the list of indicators reviewed at the second IAEG-SDG meeting' it is 'green' which means 'Indicators for which there is general agreement (or small modifications proposed), based on the fact that less than 25% of respondents have strong concerns/expressed need to discuss on priority basis; no strong opposing views by members; furthermore, some of these indicators are already well established;' So it may be added (proposed green indicator for SDG target 14.4)	In the documentation prepared for Forty-seventh session of the Statistical Commission, the colour coding has been removed and the list of indicators has been updated. The indicators in the proposed list of indicators have been updated to reflect the most recent document from this process. However further changes may be required in light of the ongoing discussions on this issue. Given the ongoing nature of the discussions the indicator criteria included in the table have been left blank for the time being. A column has also been added to the proposed list of indicators for the Strategic Plan to indicate if the indicator is a proposed SDG indicator.
European Union	49	Available	What does Y mean? It should be blank	In the documentation prepared for Forty-seventh session of the Statistical Commission, the colour coding has been removed and the list of indicators has been updated. The indicators in the proposed list of indicators have been updated to reflect the most recent document from this process. However further changes may be required in light of the ongoing discussions on this issue. Given the ongoing nature of the

Reviewer	Row Number	Heading	Review Comment	Response
				discussions the indicator criteria included in the table have been left blank for the time being. A column has also been added to the proposed list of indicators for the Strategic Plan to indicate if the indicator is a proposed SDG indicator.
European Union	49	Specific indicator	In the 'Results of the list of indicators reviewed at the second IAEG-SDG meeting' it is 'grey' which means 'Indicators where it appears that more indepth discussion is still needed and/or methodological development needs to be undertaken' . So it may be added (proposed grey indicator for SDG target 14.b)	In the documentation prepared for Forty-seventh session of the Statistical Commission, the colour coding has been removed and the list of indicators has been updated. The indicators in the proposed list of indicators have been updated to reflect the most recent document from this process. However further changes may be required in light of the ongoing discussions on this issue. Given the ongoing nature of the discussions the indicator criteria included in the table have been left blank for the time being. A column has also been added to the proposed list of indicators for the Strategic Plan to indicate if the indicator is a proposed SDG indicator.
European Union	52	Available	It should be X	In the documentation prepared for Forty-seventh session of the Statistical Commission, the colour coding has been removed and the list of indicators has been updated. The indicators in the proposed list of indicators have been updated to reflect the most recent document from this process. However further changes may be required in light of the ongoing discussions on this issue. Given the ongoing nature of the discussions the indicator criteria included in the table have been left blank for the time being. A column has also been added to the proposed list of indicators for the Strategic Plan to indicate if the indicator is a proposed SDG indicator.
European Union	52	Specific indicator	In the 'Results of the list of indicators reviewed at the second IAEG-SDG meeting' it is 'green' which means 'Indicators for which there is	In the documentation prepared for Forty-seventh session of the Statistical Commission, the colour coding has been removed and the list of

Reviewer	Row Number	Heading	Review Comment	Response
			general agreement (or small modifications proposed), based on the fact that less than 25% of respondents have strong concerns/expressed need to discuss on priority basis; no strong opposing views by members; furthermore, some of these indicators are already well established;' So it may be added (proposed green indicator for SDG target 15.2)	indicators has been updated. The indicators in the proposed list of indicators have been updated to reflect the most recent document from this process. However further changes may be required in light of the ongoing discussions on this issue. Given the ongoing nature of the discussions the indicator criteria included in the table have been left blank for the time being. A column has also been added to the proposed list of indicators for the Strategic Plan to indicate if the indicator is a proposed SDG indicator.
European Union	62	Specific indicator	In the 'Results of the list of indicators reviewed at the second IAEG-SDG meeting' it is 'grey' which means 'Indicators where it appears that more indepth discussion is still needed and/or methodological development needs to be undertaken'. So it may be added (proposed grey indicator for SDG target 14.1)	In the documentation prepared for Forty-seventh session of the Statistical Commission, the colour coding has been removed and the list of indicators has been updated. The indicators in the proposed list of indicators have been updated to reflect the most recent document from this process. However further changes may be required in light of the ongoing discussions on this issue. Given the ongoing nature of the discussions the indicator criteria included in the table have been left blank for the time being. A column has also been added to the proposed list of indicators for the Strategic Plan to indicate if the indicator is a proposed SDG indicator.
European Union	63	Specific indicator	In the 'Results of the list of indicators reviewed at the second IAEG-SDG meeting' it is 'grey' which means 'Indicators where it appears that more indepth discussion is still needed and/or methodological development needs to be undertaken' . So it may be added (proposed grey indicator for SDG target 3.9)	In the documentation prepared for Forty-seventh session of the Statistical Commission, the colour coding has been removed and the list of indicators has been updated. The indicators in the proposed list of indicators have been updated to reflect the most recent document from this process. However further changes may be required in light of the ongoing discussions on this issue. Given the ongoing nature of the discussions the indicator criteria included in the table have been left blank for the time being. A

Reviewer	Row Number	Heading	Review Comment	Response
				column has also been added to the proposed list of indicators for the Strategic Plan to indicate if the indicator is a proposed SDG indicator.
European Union	69	Available	It should be X	In the documentation prepared for Forty-seventh session of the Statistical Commission, the colour coding has been removed and the list of indicators has been updated. The indicators in the proposed list of indicators have been updated to reflect the most recent document from this process. However further changes may be required in light of the ongoing discussions on this issue. Given the ongoing nature of the discussions the indicator criteria included in the table have been left blank for the time being. A column has also been added to the proposed list of indicators for the Strategic Plan to indicate if the indicator is a proposed SDG indicator.
European Union	69	Specific indicator	In the 'Results of the list of indicators reviewed at the second IAEG-SDG meeting' it is 'green' which means 'Indicators for which there is general agreement (or small modifications proposed), based on the fact that less than 25% of respondents have strong concerns/expressed need to discuss on priority basis; no strong opposing views by members; furthermore, some of these indicators are already well established;' So it may be added (proposed green indicator for SDG target 6.3)	In the documentation prepared for Forty-seventh session of the Statistical Commission, the colour coding has been removed and the list of indicators has been updated. The indicators in the proposed list of indicators have been updated to reflect the most recent document from this process. However further changes may be required in light of the ongoing discussions on this issue. Given the ongoing nature of the discussions the indicator criteria included in the table have been left blank for the time being. A column has also been added to the proposed list of indicators for the Strategic Plan to indicate if the indicator is a proposed SDG indicator.
European Union	70	Available	It should be X	In the documentation prepared for Forty-seventh session of the Statistical Commission, the colour coding has been removed and the list of indicators has been updated. The indicators in the proposed list of indicators have been updated to

Reviewer	Row Number	Heading	Review Comment	Response
				reflect the most recent document from this process. However further changes may be required in light of the ongoing discussions on this issue. Given the ongoing nature of the discussions the indicator criteria included in the table have been left blank for the time being. A column has also been added to the proposed list of indicators for the Strategic Plan to indicate if the indicator is a proposed SDG indicator.
European Union	70	Specific indicator	In the 'Results of the list of indicators reviewed at the second IAEG-SDG meeting' it is 'green' which means 'Indicators for which there is general agreement (or small modifications proposed), based on the fact that less than 25% of respondents have strong concerns/expressed need to discuss on priority basis; no strong opposing views by members; furthermore, some of these indicators are already well established;' So it may be added (proposed green indicator for SDG target 6.3)	In the documentation prepared for Forty-seventh session of the Statistical Commission, the colour coding has been removed and the list of indicators has been updated. The indicators in the proposed list of indicators have been updated to reflect the most recent document from this process. However further changes may be required in light of the ongoing discussions on this issue. Given the ongoing nature of the discussions the indicator criteria included in the table have been left blank for the time being. A column has also been added to the proposed list of indicators for the Strategic Plan to indicate if the indicator is a proposed SDG indicator.
European Union	74	Available	delete X ( <del>X)</del>	In the documentation prepared for Forty-seventh session of the Statistical Commission, the colour coding has been removed and the list of indicators has been updated. The indicators in the proposed list of indicators have been updated to reflect the most recent document from this process. However further changes may be required in light of the ongoing discussions on this issue. Given the ongoing nature of the discussions the indicator criteria included in the table have been left blank for the time being. A column has also been added to the proposed list of indicators for the Strategic Plan to indicate if

Reviewer	Row Number	Heading	Review Comment	Response
				the indicator is a proposed SDG indicator.
European Union	74	Specific indicator	In the 'Results of the list of indicators reviewed at the second IAEG-SDG meeting' it is 'grey' which means 'Indicators where it appears that more indepth discussion is still needed and/or methodological development needs to be undertaken'. So it may be added (proposed grey indicator for SDG target 15.8)	In the documentation prepared for Forty-seventh session of the Statistical Commission, the colour coding has been removed and the list of indicators has been updated. The indicators in the proposed list of indicators have been updated to reflect the most recent document from this process. However further changes may be required in light of the ongoing discussions on this issue. Given the ongoing nature of the discussions the indicator criteria included in the table have been left blank for the time being. A column has also been added to the proposed list of indicators for the Strategic Plan to indicate if the indicator is a proposed SDG indicator.
European Union	81	Available	It should be X	In the documentation prepared for Forty-seventh session of the Statistical Commission, the colour coding has been removed and the list of indicators has been updated. The indicators in the proposed list of indicators have been updated to reflect the most recent document from this process. However further changes may be required in light of the ongoing discussions on this issue. Given the ongoing nature of the discussions the indicator criteria included in the table have been left blank for the time being. A column has also been added to the proposed list of indicators for the Strategic Plan to indicate if the indicator is a proposed SDG indicator.
European Union	81	Specific indicator	In the 'Results of the list of indicators reviewed at the second IAEG-SDG meeting' it is 'green' which means 'Indicators for which there is general agreement (or small modifications proposed), based on the fact that less than 25% of respondents have strong concerns/expressed need to discuss on priority basis; no strong	In the documentation prepared for Forty-seventh session of the Statistical Commission, the colour coding has been removed and the list of indicators has been updated. The indicators in the proposed list of indicators have been updated to reflect the most recent document from this process. However further changes may be

Reviewer	Row Number	Heading	Review Comment	Response
			opposing views by members; furthermore, some of these indicators are already well established;' So it may be added (proposed green indicator for SDG target 14.3)	required in light of the ongoing discussions on this issue. Given the ongoing nature of the discussions the indicator criteria included in the table have been left blank for the time being. A column has also been added to the proposed list of indicators for the Strategic Plan to indicate if the indicator is a proposed SDG indicator.
European Union	90	Specific indicator	In the 'Results of the list of indicators reviewed at the second IAEG-SDG meeting' it is 'green' which means 'Indicators for which there is general agreement (or small modifications proposed), based on the fact that less than 25% of respondents have strong concerns/expressed need to discuss on priority basis; no strong opposing views by members; furthermore, some of these indicators are already well established;' So it may be added (proposed green indicator for SDG target 14.5)	In the documentation prepared for Forty-seventh session of the Statistical Commission, the colour coding has been removed and the list of indicators has been updated. The indicators in the proposed list of indicators have been updated to reflect the most recent document from this process. However further changes may be required in light of the ongoing discussions on this issue. Given the ongoing nature of the discussions the indicator criteria included in the table have been left blank for the time being. A column has also been added to the proposed list of indicators for the Strategic Plan to indicate if the indicator is a proposed SDG indicator.
European Union	103	Specific indicator	In the 'Results of the list of indicators reviewed at the second IAEG-SDG meeting' it is 'green' which means 'Indicators for which there is general agreement (or small modifications proposed), based on the fact that less than 25% of respondents have strong concerns/expressed need to discuss on priority basis; no strong opposing views by members; furthermore, some of these indicators are already well established;' So it may be added (proposed green indicator for SDG target 15.5)	In the documentation prepared for Forty-seventh session of the Statistical Commission, the colour coding has been removed and the list of indicators has been updated. The indicators in the proposed list of indicators have been updated to reflect the most recent document from this process. However further changes may be required in light of the ongoing discussions on this issue. Given the ongoing nature of the discussions the indicator criteria included in the table have been left blank for the time being. A column has also been added to the proposed list of indicators for the Strategic Plan to indicate if the indicator is a proposed SDG indicator.
European	108	Available	delete X ( <del>X)</del>	In the documentation prepared for Forty-seventh

Reviewer	Row Number	Heading	Review Comment	Response
Union				session of the Statistical Commission, the colour coding has been removed and the list of indicators has been updated. The indicators in the proposed list of indicators have been updated to reflect the most recent document from this process. However further changes may be required in light of the ongoing discussions on this issue. Given the ongoing nature of the discussions the indicator criteria included in the table have been left blank for the time being. A column has also been added to the proposed list of indicators for the Strategic Plan to indicate if the indicator is a proposed SDG indicator.
European Union	108	Specific indicator	In the 'Results of the list of indicators reviewed at the second IAEG-SDG meeting' it is 'grey' which means 'Indicators where it appears that more indepth discussion is still needed and/or methodological development needs to be undertaken'. So it may be added (proposed grey indicator for SDG target 2.5)	In the documentation prepared for Forty-seventh session of the Statistical Commission, the colour coding has been removed and the list of indicators has been updated. The indicators in the proposed list of indicators have been updated to reflect the most recent document from this process. However further changes may be required in light of the ongoing discussions on this issue. Given the ongoing nature of the discussions the indicator criteria included in the table have been left blank for the time being. A column has also been added to the proposed list of indicators for the Strategic Plan to indicate if the indicator is a proposed SDG indicator.
European Union	109	Available	delete X ( <del>X)</del>	In the documentation prepared for Forty-seventh session of the Statistical Commission, the colour coding has been removed and the list of indicators has been updated. The indicators in the proposed list of indicators have been updated to reflect the most recent document from this process. However further changes may be required in light of the ongoing discussions on this issue. Given the ongoing nature of the

Reviewer	Row Number	Heading	Review Comment	Response
				discussions the indicator criteria included in the table have been left blank for the time being. A column has also been added to the proposed list of indicators for the Strategic Plan to indicate if the indicator is a proposed SDG indicator.
European Union	109	Specific indicator	In the 'Results of the list of indicators reviewed at the second IAEG-SDG meeting' it is 'grey' which means 'Indicators where it appears that more indepth discussion is still needed and/or methodological development needs to be undertaken' . So it may be added (proposed grey indicator for SDG target 2.5)	In the documentation prepared for Forty-seventh session of the Statistical Commission, the colour coding has been removed and the list of indicators has been updated. The indicators in the proposed list of indicators have been updated to reflect the most recent document from this process. However further changes may be required in light of the ongoing discussions on this issue. Given the ongoing nature of the discussions the indicator criteria included in the table have been left blank for the time being. A column has also been added to the proposed list of indicators for the Strategic Plan to indicate if the indicator is a proposed SDG indicator.
European Union	120	Available	What does Y mean? It should be X	In the documentation prepared for Forty-seventh session of the Statistical Commission, the colour coding has been removed and the list of indicators has been updated. The indicators in the proposed list of indicators have been updated to reflect the most recent document from this process. However further changes may be required in light of the ongoing discussions on this issue. Given the ongoing nature of the discussions the indicator criteria included in the table have been left blank for the time being. A column has also been added to the proposed list of indicators for the Strategic Plan to indicate if the indicator is a proposed SDG indicator.
European Union	120	Specific indicator	In the 'Results of the list of indicators reviewed at the second IAEG-SDG meeting' it is 'green' which means 'Indicators for which there is	In the documentation prepared for Forty-seventh session of the Statistical Commission, the color coding has been removed and the list of

Reviewer	Row Number	Heading	Review Comment	Response
			general agreement (or small modifications proposed), based on the fact that less than 25% of respondents have strong concerns/expressed need to discuss on priority basis; no strong opposing views by members; furthermore, some of these indicators are already well established;' So it may be added (proposed green indicator for SDG target 15.4)	indicators has been updated. The indicators in the proposed list of indicators have been updated to reflect the most recent document from this process. However further changes may be required in light of the ongoing discussions on this issue. Given the ongoing nature of the discussions the indicator criteria included in the table have been left blank for the time being. A column has also been added to the proposed list of indicators for the Strategic Plan to indicate if the indicator is a proposed SDG indicator.
European Union	123	Specific indicator	In the 'Results of the list of indicators reviewed at the second IAEG-SDG meeting' it is 'green' which means 'Indicators for which there is general agreement (or small modifications proposed), based on the fact that less than 25% of respondents have strong concerns/expressed need to discuss on priority basis; no strong opposing views by members; furthermore, some of these indicators are already well established;' So it may be added (proposed green indicator for SDG target 6.1)	In the documentation prepared for Forty-seventh session of the Statistical Commission, the colour coding has been removed and the list of indicators has been updated. The indicators in the proposed list of indicators have been updated to reflect the most recent document from this process. However further changes may be required in light of the ongoing discussions on this issue. Given the ongoing nature of the discussions the indicator criteria included in the table have been left blank for the time being. A column has also been added to the proposed list of indicators for the Strategic Plan to indicate if the indicator is a proposed SDG indicator.
European Union	131	Specific indicator	In the 'Results of the list of indicators reviewed at the second IAEG-SDG meeting' it is 'grey' which means 'Indicators where it appears that more indepth discussion is still needed and/or methodological development needs to be undertaken' . So it may be added (proposed grey indicator for SDG target 1.b)	In the documentation prepared for Forty-seventh session of the Statistical Commission, the colour coding has been removed and the list of indicators has been updated. The indicators in the proposed list of indicators have been updated to reflect the most recent document from this process. However further changes may be required in light of the ongoing discussions on this issue. Given the ongoing nature of the discussions the indicator criteria included in the table have been left blank for the time being. A

Reviewer	Row Number	Heading	Review Comment	Response
				column has also been added to the proposed list of indicators for the Strategic Plan to indicate if the indicator is a proposed SDG indicator.
European Union	132	Available	It should be X	In the documentation prepared for Forty-seventh session of the Statistical Commission, the colour coding has been removed and the list of indicators has been updated. The indicators in the proposed list of indicators have been updated to reflect the most recent document from this process. However further changes may be required in light of the ongoing discussions on this issue. Given the ongoing nature of the discussions the indicator criteria included in the table have been left blank for the time being. A column has also been added to the proposed list of indicators for the Strategic Plan to indicate if the indicator is a proposed SDG indicator.
European Union	132	Specific indicator	In the 'Results of the list of indicators reviewed at the second IAEG-SDG meeting' it is 'green' which means 'Indicators for which there is general agreement (or small modifications proposed), based on the fact that less than 25% of respondents have strong concerns/expressed need to discuss on priority basis; no strong opposing views by members; furthermore, some of these indicators are already well established;' So it may be added (proposed green indicator for SDG target 5.a)	In the documentation prepared for Forty-seventh session of the Statistical Commission, the colour coding has been removed and the list of indicators has been updated. The indicators in the proposed list of indicators have been updated to reflect the most recent document from this process. However further changes may be required in light of the ongoing discussions on this issue. Given the ongoing nature of the discussions the indicator criteria included in the table have been left blank for the time being. A column has also been added to the proposed list of indicators for the Strategic Plan to indicate if the indicator is a proposed SDG indicator.
European Union	140	Available	It should be X	In the documentation prepared for Forty-seventh session of the Statistical Commission, the colour coding has been removed and the list of indicators has been updated. The indicators in the proposed list of indicators have been updated to

Reviewer	Row Number	Heading	Review Comment	Response
				reflect the most recent document from this process. However further changes may be required in light of the ongoing discussions on this issue. Given the ongoing nature of the discussions the indicator criteria included in the table have been left blank for the time being. A column has also been added to the proposed list of indicators for the Strategic Plan to indicate if the indicator is a proposed SDG indicator.
European Union	140	Specific indicator	In the 'Results of the list of indicators reviewed at the second IAEG-SDG meeting' it is 'green' which means 'Indicators for which there is general agreement (or small modifications proposed), based on the fact that less than 25% of respondents have strong concerns/expressed need to discuss on priority basis; no strong opposing views by members; furthermore, some of these indicators are already well established;' So it may be added (proposed green indicator for SDG target 14.a)	In the documentation prepared for Forty-seventh session of the Statistical Commission, the colour coding has been removed and the list of indicators has been updated. The indicators in the proposed list of indicators have been updated to reflect the most recent document from this process. However further changes may be required in light of the ongoing discussions on this issue. Given the ongoing nature of the discussions the indicator criteria included in the table have been left blank for the time being. A column has also been added to the proposed list of indicators for the Strategic Plan to indicate if the indicator is a proposed SDG indicator.
European Union		Available	I am missing the legend: what is the difference between 'X' and 'Y'?	In the heading it is noted that X indicates that the indicator is currently available while Y indicates that it is under active development. No change has been made to the proposed list of indicators.
FAO	109	Global Indicator can be disaggregated to create national indicator	Here is an X missing, as "Percentage of local breeds, classified as being at-risk, not atrisk or unknown level of risk of extinction" can easily be calculated on national level.	Change made
FAO	109	National data are aggregate	· Here is an X missing, as for the global indicator "Percentage of local breeds, classified	Change made

Reviewer	Row Number	Heading	Review Comment	Response
		to form global	as being at-risk, not at-risk or unknown level of	
		indicator	risk of extinction" national data are summed up.	
FAO	109	Specific Indicator	It is not advisable to cover both aspects (local crops and breeds) within one indicator as the costs for the periodic collection of the necessary data on local crops diversity, on farm, and their wild relatives, <i>in-situ</i> , would outreach the expected benefits by far and the reliability of data is expected to be rather low.  It is therefore strongly suggested to go back to the originally proposed indicator: "Percentage of local breeds, classified as being at-risk, not atrisk or unknown level of risk of extinction"  § as this indicator is well established and used by the 178 member countries of the Commission on Genetic Resources for Food and Agriculture to monitor the implementation of the Global Plan of Action and is one of the indicators for Aichi-Target 13  § as the country data are officially provided by National Coordinators nominated by their respective Ministries (usually ministry of agriculture)  § as the data are already available and regularly updated	The indicator is a proposed SDG indicator. The list of indicators has been updated to reflect the documentation for the 47th sessions of the United Nations Statistical Commission. No change made.
FAO	114	Available today	We can put a Y since the indicator is available today for animal genetic resources and under development for plant GR. It will be also developed for forest GR soon.	Change made
FAO	114	Easy to communicate	We can put x as the indicator is monitored through a color-coded system that makes it very easy to communicate.	Change made

Reviewer	Row Number	Heading	Review Comment	Response
FAO	114	Global indicator can be disaggregated	We can put a x as the indicator can be disaggregated since data are provided by countries.	Change made
FAO	114	National data are aggregated	We can put a x as data are provided by countries and aggregated.	Change made
FAO	114	Source	FAO should be put as a source since the indicators are collected by FAO under the overall responsibility of the Commission on Genetic Resources for Food and Agriculture.	Change made
Finland	8	row number 50	Areas of agricultural land under organic production; source IFOAM: in many countries the official data on organic production is produced by official monitoring authorities, so in these cases this monitoring data should be the data source of the country (not the data produced by IFOAM).	The proposed list of indicators focuses on the global level. The list provides a flexibly framework for countries to apply as appropriate. It is not clear if the indicator proposed by the comment is currently under development or if it exists. No change to the proposed list of indicators has been made.
Finland	30	Source	Trends in forest extent (forest cover) refer to the forest cover map of Hansen. This map has failed in detecting the forest cover changes in Nordic conditions. E.g. in Finland and Sweden, the in situ observations (National Forest Inventories) show that the deforestation rate estimated by the map of Hansen is not correct. It is questionable if this kind of product can be used.	The Hansen data has been published and was used in GBO-4. The data has limitations like most indictors. These limitations need to be recognized when the data is used. The indicator based on national forest inventories (FAO) is also in the list. No change to the proposed indicator list has been made.
Finland	36	Source	The biodiversity habitat index of Geobon relies on the forest cover map of Hansen. This map has failed in detecting the forest cover changes in Nordic conditions. This leads to erronous biodiversity habitat index values.	The Hansen data has been published and was used in GBO-4. The data has limitations like most indictors. These limitations need to be recognized when the data is used. The indicator is noted as being under development. No changes to the proposed indicators have been made.
Finland	51 and 52	Specific Indicator	Specific Indicators: Areas of agricultural land under conservation agriculture (and Percentage of agricultural area under sustainable agricultural practices): in the Northern parts of Europe, and other similar areas, the preservation of	It is not clear if the proposed indicator currently exists or is being actively developed. No change to the proposed list of indicators has been made.

Reviewer	Row Number	Heading	Review Comment	Response
			biodiversity produced by the agriculture is not possible only by large scale preservation land or species but the active agricultural management measures are needed: maintaining the biodiversity dependent on the agriculture demands continuous management activities by farmers, and these are dependent on the costeffective agricultural production. (The management of agricultural areas and the preservation of species need the possibilities to continue breeding of the grazing cattle.) Instead of monitoring of the numbers/amount of these conservation areas the monitoring should also be concerning the amount of the areas under active agriculture management areas.	
Fondazione Edmund Mach and Harvard University	97	Available today (X) or under active development (Y)	X	The indicator has been included in the list under "trends in extinction risk and populations of species". In order to keep the proposed list to a manageable size, indicators have only been included once.
Fondazione Edmund Mach and Harvard University	97	Easy to communicate	X	The indicator has been included in the list under "trends in extinction risk and populations of species". In order to keep the proposed list to a manageable size, indicators have only been included once.
Fondazione Edmund Mach and Harvard University	97	Generic Indicator	Add one more indicator under Trends in effectiveness and/or equitability of management of protected areas.	The indicator has been included in the list under "trends in extinction risk and populations of species". In order to keep the proposed list to a manageable size, indicators have only been included once.
Fondazione Edmund Mach and Harvard University	97	Global indicator can be disaggregated to create national	It can be, but it is limited by the number of sites in each country. As the TEAM network expands and Wildlife Insights (federated camera trap project – TEAM, CI, Smithsonian, WCS, North Carolina Museum of Natural Sciences) is implemented the number of data sets will grow.	The indicator has been included in the list under "trends in extinction risk and populations of species". In order to keep the proposed list to a manageable size, indicators have only been included once.

Reviewer	Row Number	Heading	Review Comment	Response
		indicator		
Fondazione Edmund Mach and Harvard University	97	National data are aggregated to form global indicator	Can be, but the minimum spatial unit is of aggregation is local data (at the level of a protected area or site).	The indicator has been included in the list under "trends in extinction risk and populations of species". In order to keep the proposed list to a manageable size, indicators have only been included once.
Fondazione Edmund Mach and Harvard University	97	Source	Tropical Ecology Assessment and Monitoring (TEAM) Network	The indicator has been included in the list under "trends in extinction risk and populations of species". In order to keep the proposed list to a manageable size, indicators have only been included once.
Fondazione Edmund Mach and Harvard University	97	Specific Indicator	The Wildlife Picture Index (disaggregated by protected area): When calculated at the scale of a protected area, the WPI can measure the effectiveness of protected areas as actual conservation outcomes because its measures trends in biodiversity through time.	The indicator has been included in the list under "trends in extinction risk and populations of species". In order to keep the proposed list to a manageable size, indicators have only been included once.
Fondazione Edmund Mach and Harvard University	97	Used in GBO3/GBO4	No	The indicator has been included in the list under "trends in extinction risk and populations of species". In order to keep the proposed list to a manageable size, indicators have only been included once.
Fondazione Edmund Mach and Harvard University	107	Available today (X) or under active development (Y)	X	Change made
Fondazione Edmund Mach and Harvard University	107	Easy to communicate	X	Change made
Fondazione Edmund Mach and Harvard	107	Generic Indicator	Add one more indicator under Trends in extinction risk and populations of species	Given that the indicator is available and has been published and is reflected in the Biodiversity Indicators Partnership, the indicator has been added to the proposed list.

Reviewer	Row Number	Heading	Review Comment	Response
University				
Fondazione Edmund Mach and Harvard University	107	Global indicator can be disaggregated to create national indicator	It can be, but currently limited by the number of sites in each country. As the TEAM network expands and Wildlife Insights (federated camera trap project – TEAM, CI, Smithsonian, WCS, North Carolina Museum of Natural Sciences) is implemented the number of data sets will grow.	As the data set is currently limited, the indicator has not been noted as being disaggregated to national level. No change made
Fondazione Edmund Mach and Harvard University	107	National data are aggregated to form global indicator	Can be, but the minimum spatial unit of aggregation is local data (at the level of a protected area or site).	As the data set is currently limited, the indicator has not been noted as being disaggregated to national level. No change made
Fondazione Edmund Mach and Harvard University	107	Source	Tropical Ecology Assessment and Monitoring (TEAM) Network	Change made
Fondazione Edmund Mach and Harvard University	107	Specific Indicator	The Wildlife Picture Index: This is the only index included within the BIP that uses in situ primary data to monitor populations of ground-dwelling mammals and birds in tropical forests (see Beaudrot et al., 2015, O'Brien et al. 2008). It fills an important geographic gap for tropical forests globally and covers a critical group of species (about 300 between mammals and birds). It is also updated in near-real time (within months of data collection)	Given that the indicator is available and has been published and is reflected in the Biodiversity Indicators Partnership, the indicator has been added to the proposed list.
Fondazione Edmund Mach and Harvard University	107	Used in GBO3/GBO4	Included in Appendixes of GBO4.	Change made
Forest Peoples Programme	132	Specific Indicator	In addition to the current specific indicator for this generic indicator, we would like to recommend the inclusion of an additional	The status of the indicator is not clear. No change has been made to the proposed list of indicators.

Reviewer	Row Number	Heading	Review Comment	Response
			specific indicator, as recommended by AHTEG in SBSTTA-19-INF-5 and as included in document UNEP/CBD/SBSTTA/19/5 in relation to Target 18 (p. 14): 'Percentage of women, men indigenous peoples and local communities with secure rights to land property and natural resources measured by:  • Percentage with legally documented or recognized evidence of tenure  • Percentage who perceive their rights recognized and protected (proposed indicator for SDG target 1.4)'  This additional indicator is needed in order to address the meaning of 'land tenure' so that it includes different types and degrees of legal recognition of land ownership by indigenous peoples and local communities and how land use change in the territories of indigenous peoples and local communities relate to the achievement of Target 18 and other Aichi Biodiversity  Targets. Some organisations are already starting to gather this data, for example Rights and Resources Initiative and the Landmark online platform and this information, once collected nationally, could be easily communicated and aggregated into global indicators.	
Forest Peoples	133	Specific indicator	Percentage of people (disaggregated by gender and age) who practice traditional occupations in indigenous and local communities.  Number of community-led [or externally	The status of the indicator is not clear. No change has been made to the proposed list of
Programme		indicator	supported initiatives] that promote transmission or revitalisation of traditional occupations.  There are already some some national examples of this kind of data collection, e.g. the Philippine	indicators.

Reviewer	Row Number	Heading	Review Comment	Response
			Traditional Knowledge Network. If more national data can be collected and aggregated into a global indicator then this information would be invaluable for detailing progress in achieving Target 18.	
Forest Peoples Programme	134	Specific indicator	a. Number of Parties reporting support and integration for TK and CSU in NBSAPs and relevant national laws and policies. b. Number of laws or regulations that support or prohibit traditional practices. c. Number of Parties reporting effective participation of indigenous peoples and local communities in the development and implementation of NBSAPs [ Number of IPLCs participating and outcome of participation]	The status of the indicator is not clear. No change has been made to the proposed list of indicators.
Forest Peoples Programme	119-120	Specific Indicator	We would like to recommend an additional specific indicator for the Generic Indicator 'Trends in benefits from ecosystem services': 'a) Percentage of people with ownership or secure rights over agricultural land (out of total agricultural population), by sex; and (b) Share of women among owners or rights-bearers of agricultural land", by type of tenure (proposed indicator for SDG target 5.a 'This additional indicator is necessary because of the inextricable link between access to ecosystem services and land tenure rights. Access to ecosystem services depend on access to the land, especially in the case of indigenous peoples and local communities. This indicator was originally included in the AHTEG specific indicators.	It is not clear if the indicators exist or who is actively developing them. The indicators are not in the current proposal for the SDG indicators. No changes have been made to the proposed list of indicators.
Forest Peoples Programme	119-120	Specific Indicator	We would like to recommend a further additional specific indicator for the Generic Indicator 'Trends in benefits from ecosystem services':  'Percentage of water bodies with good ambient	The indicator has been included under target 8

Reviewer	Row Number	Heading	Review Comment	Response
			water quality (proposed indicator for SDG target 6.3)'	
			This specific indicator was identified during the most recent review of indicators by AHTEG in 2015 as being important for this Target. Water quality has become an increasingly important measure of health and wellbeing and therefore specific analysis of the ambient water quality is essential for Target 14. Furthermore, this global indicator would be easy to disaggregate into national indicators and would provide easy to communicate information on ecosystem services and therefore the achievement of Target 14.	
Forest Peoples Programme	119-129	Specific Indicator	We would recommend the inclusion of an additional indicator recommend by AHTEG in September 2015 for the Generic Indicator 'Trends in benefits from ecosystem services':  'Percentage of change in wetlands extent over time (proposed indicator for SDG target 6.6)' The health of wetlands and changes in their coverage has significant knock-on effects for ecosystem services.  Wetlands are specifically mentioned in GBO4 among their key potential actions as areas whose extent and degradation needs to be considered when monitoring the achievement of Strategic Goal 14: 'Reducing the pressures on and, where necessary, enhancing the protection and restoration of those ecosystems providing essential services (for example wetlands, coral reefs, rivers, and forests and mountain areas acting as "water towers", among others).'	The indicator has been included under target 5
Forest	97-98	Specific	We would like to recommend an additional	It is not clear if the indicators exist or who is

Reviewer	Row Number	Heading	Review Comment	Response
Peoples Programme		Indicator	specific indicator for the Generic Indicator 'Trends in effectiveness and/or equitability of management of conserved areas': 'Percentage of women, men indigenous peoples and local communities with secure rights to land property and natural resources measured by: • Percentage with legally documented or recognized evidence of tenure. • Percentage who perceive their rights recognized and protected (proposed indicator for SDG target 1.4). 'This additional indicator, which was already included under Target 18 in document UNEP/CBD/SBSTTA/19/5 (p. 14) is needed in order to ensure that protected areas are established, governed and managed in a way that respects the rights of indigenous peoples and local communities and ensures their full and effective participation, as called for under element 2 of the CBD Programme of Work on Protected Areas as well as priority task 3 of the CBD Plan of Action on Customary Sustainable Use. This additional specific indicator will also help to monitor the degree of use of other effective area-based conservation measures, which are often put in place by indigenous peoples and local communities.	actively developing them. The indicators are not in the current proposal for the SDG indicators. No changes have been made to the proposed list of indicators.
Friends of the Earth Europe	1	Specific indicator	In addition to the UEBT Biodiversity barometer, there are a number of other sources which not only address awareness of the concept of biodiversity, but also indicate how people feel about the state/threat of their national biodiversity. For the EU, there is the regularly updated study "Attitudes of Europeans towards the issue of biodiversity - EU Flash Barometer No. 290" http://ec.europa.eu/public_opinion/flash/fl_290_s um_en.pdf	The proposed list of indicators focuses on the global level. The list provides a flexible framework for countries to apply as appropriate. No change to the proposed list of indicators has been made.

Reviewer	Row Number	Heading	Review Comment	Response
			For Switzerland, there is a similar study: http://www.gfsbern.ch/DesktopModules/EasyDN NNews/DocumentDownload.ashx?portalid=0&m oduleid=677&articleid=994&documentid=89	
			Ideally, similar data would be available also in other parts of the world; as the methodology has been developed, it would be possible to extend these surveys beyond Europe and conduct the same survey in all other countries with a limited amount of resources	
Friends of the Earth Europe	4	Specific indicator	Friends of the Earth Europe have gathered data on the proposed indicator in their CBD Strategic plan barometer http://www.foeeurope.org/sites/default/files/prog ress-towards-aichi-targets-oct2014.pdf  but not published it (yet), as NGO membership also depends on a number of other factors, such as general conditions for civil society involvement. We (members of FoE Europe) would, however, be happy to share our data if this indicator is chosen.	The indicator has been removed from the proposed list. It is not clear if information is currently available at the global level and/or from organizations with global membership.
Friends of the Earth Europe	7	Specific indicator	We support the indicator in row 7. However, it is also important to integrate biodiversity into spatial planning. We would like to propose an additional indicator "Number of parties whose spatial planning includes a layer/category of priority areas for biodiversity". This would include both protected areas of different types as well as corridors. The indicator could look both at the plans themselves as well as at the legislation (is there a legal requirement to do spatial planning for biodiversity"	It is not clear if the indicator currently exists and/or if it is being actively developed. No change to the proposed list of indicators has been made.
Friends of the Earth	10	Specific indicator	Following preliminary studies to identify these perverse subsidies (which have identified several	Some of the proposed indicators are included in the financial reporting framework which is an

Reviewer	Row Number	Heading	Review Comment	Response
Europe			issues with their identification and quantification), FoE Europe, in their CBD SP barometer, have disaggregated this indicator into the following indicators:	indicator for Target 20. For the other indicators it is not clear if these already exists or if they are being actively developed. No change to the proposed list of indicators has been made.
			- Number of countries that have identified incentives and subsidies potentially harmful for biodiversity (Following CBD reporting obligations in the implementation of CBD decisions X/2 and XII/3)	
			- Number of countries that have developed plans to phase these out (as indicated in Annex I, of decision CBD/COP/DEC/XII/3, notably No.1(a))	
			- Number of countries that actually have done so	
			- Subsidies redirected towards support for biodiversity	
			The quoted OECD study only covers agriculture (which is important but not everything) and we hope it covers our suggested disaggregated indicators. We would also suggest the CBD would take at least the first two of our suggested indicators on board of the list of indicators.	
			Perverse incentives are a key issue on which there is a lot of consensus, while there is practically nothing being done to change this on a practical level. It is of paramount importance that the CBD strongly follow this up and push	
			national governments to address this issue.	
Friends of the Earth Europe	13	Specific indicator	Not all PES are beneficial for biodiversity, notably if they are only focussed on one ES. If the ES is not needed any more for any reason, the	The indicator has been modified to reflect wording used by the OECD. The indicator is not the only one being proposed. As with all the

Reviewer	Row Number	Heading	Review Comment	Response
			ecosystem loses its value and can legitimately be destroyed, even if it is still an important area for biodiversity. For more details, see FoE International's position on financialisation:	targets multiple indicators/sources of information will be required to assess progress towards their implementation.
			http://www.foei.org/wp-content/uploads/2015/10/Financialization-of-Nature-brochure-English.pdf - notably p.11 -	
			and the FoEE positon on biodiversity:	
			http://www.foeeurope.org/sites/default/files/1209 03_foee_biodiv_position_final.pdf - chapter 3.2.3 -	
			We therefore strongly recommend not to use the mere presence of PES schemes as a yardstick for achieving Aichi target 3.	
			In our view, the number of countries with national instruments on REDD plus schemes using UN-REDD data is per se not suited to reflect progress on positive incentives for biodiversity, for the reasons mentioned above and the following ones:  - UN-REDD collects data on national REDD+	The indicator is not the only one being proposed. As with all the targets multiple indicators/sources of information will be required to assess progress
Friends of the Earth Europe	14		development initiated by other institutions as well (such as the World Bank's FCPF, which does contain some market-based funding). So this means all types of REDD+ schemes would be covered by the indicator, including those with substantially weaker standards on biodiversity than those recommended by the UN-REDD program. But only REDD projects that respect all the necessary safeguards, rights and biodiversity, should be counted towards the target.	towards their implementation. As the indicator can provide useful information, provided that it is correctly interpreted, it has been retained in the proposed list. No change to the proposed list of indicators has been made.

Reviewer	Row Number	Heading	Review Comment	Response
			- REDD, as agreed in Cancun in 2010, includes 5 possible measures under REDD including afforestation measures by plantations. Also, the safeguards agreed in Cancun are not sufficient. REDD does not always and per se deliver benefits for biodiversity.	
			- If REDD incentives are market-based, they can lead to perverse incentives, such as afforestations to compensate for Fossil fuel emissions in industrialised countries.	
			We therefore strongly urge not to use UN-REDD as an indicator for Aichi target 3.	
			A more appropriate indicator would be «the number of countries whose REDD+ schemes explicitly incentivizes, and reports on, biodiversity benefits and safeguards ».	
Friends of the Earth Europe	15		Biodiversity offsetting can produce a "license to trash" and facilitate destruction of nature – rather than avoiding negative impacts in the first place, it focuses on substitutes which often do neither work nor stop overall biodiversity loss. For details, see https://www.foeeurope.org/sites/default/files/pub lications/foee_position_nature_is_not_for_sale.p df	This indicator, like most indicators, has limitations. These limitations should be acknowledged when the indicator is used. However despite having limitations the indicator can still provide useful information the indicator is being proposed for use in conjunction with
			This critical view on biodiversity offsetting is shared by many NGOs globally: http://no-biodiversity-offsets.makenoise.org/  We therefore strongly object to using this	additional indicators. No change has been made to the proposed list of indicators.
			indicator.	

Reviewer	Row Number	Heading	Review Comment	Response
Friends of the Earth Europe	15		We would like to suggest using the parts related to domestic biodiversity-related expenditure form the suggested indicator of Aichi target 20 (see below), i.e the amount of official money spent for biodiversity, to measure progress on providing biodiversity finance – government budgets provide key incentives for maintaining, safeguarding and developing biodiversity.	Indicators have only been included in the proposed list of indicators once in order to keep the document to a manageable size. No change has been made to the proposed list of indicators.
Friends of the Earth Europe	20		In order to properly link drivers and consequences, we suggest to disaggregate the global footprint into the four footprints suggested by FoE Europe, and specifically make use of the land footprint which has the closest link to biodiversity. (see here for the concept: https://www.foeeurope.org/sites/default/files/foe e-briefing-four-footprints.pdf and here for results: http://creea.eu/index.php/7-project/8-creea-booklet)	No change to the indicator has been made. The decision to disaggregate the information would depend on the type of assessments being undertaken. By keeping the indicator "whole" it can still be disaggregated.
Friends of the Earth Europe	33	Specific indicator	This indicator is much too rough and sketchy.  Land area minus urban and agriculture does not reflect the natural habitats the CBD strives to conserve. On one hand, this definition would include plantations as forests and thus as natural habitats, on the other hand many important seminatural habitats influenced by agriculture, such as species-rich grasslands in Europe, would be excluded.  It would seem more appropriate to monitor the development of specific habitats, such as  peatlands,  wetlands or  High Nature Value grasslands.	Wetland habitat extent is included in the proposed list of indicators. It is not clear if the additional proposed indicators exist or if they are being actively developed. The indicator in the proposed list, like most indicators, has limitations. However despite these limitations it can still provide useful information provided that these limitations are acknowledge. No change to the proposed list of indicators has been made.
Friends of the Earth Europe	34	Specific indicator	We suggest to use the effective mesh density (s <sup>eff</sup> ) in order to measure landscape fragmentation. This has already been	It is not clear if the proposed indicator is available at the global level or if there are ongoing efforts to develop it globally. No change

Reviewer	Row Number	Heading	Review Comment	Response
			successfully done for Europe: http://www.bafu.admin.ch/publikationen/publikat ion/01621/index.html?lang=en and the method can also be applied in other regions.	to the proposed list of indicators has been made.
Friends of the Earth Europe	41	Specific indicator	We suggest to look at the "number of parties who have developed national strategies" to address this issue.	It is not clear if the proposed indicator is available or if there are ongoing efforts to develop it. No change to the proposed list of indicators has been made.
Friends of the Earth Europe	52	Specific indicator	While we agree on this indicator, the term "sustainable agricultural practices" needs to be clearly defined and be biodiversity-related.	The indicator has been proposed through the SDG indicator process. No change has been made to the proposed list of indicators.
Friends of the Earth Europe	56	Specific indicator	The term "sustainable forest management" needs to be clearly defined, notably in terms of biodiversity. It should not be applicable to primary forests, as it is done e.g. in Tasmania; clear-cutting a primary forest is never sustainable, even if it reforested afterwards.	It is not clear what change is being suggested. The list of indicators has been updated to reflect the documentation for the 47th sessions of the United Nations Statistical Commission
Friends of the Earth Europe	68	Specific indicator	Nutrient loading is a key issue in industrialised countries. The measurement of surplus of nitrogen should include the concept of "critical loads" and give an indication of what a balanced nutrient household would be.	It is not clear if the proposed indicator exists or is being developed. No change to the proposed list of indicators has been made.
Friends of the Earth Europe	83	Specific indicator	All proposed indicators on Aichi target 10 are geared towards coral reefs. We suggest to add an indicator on the development of glaciers (No. of glaciers that are shrinking) to cover at least some of the other ecosystems particularly affected by climate change.	The proposed indicator does not address the target. The target is about reducing other anthropogenic pressures on ecosystems vulnerable to climate change and ocean acidification. Trends in glacier mass would not address this. No change to the propose list of indicators has been made
Friends of the Earth Europe	88	Specific indicator	It is important to include protected areas that really ensure an effective and strict protection of biodiversity. Therefore, only protected areas of IUCN Categories I-IV (including Communitymanaged Protected areas) should be included when measuring.	The data set supporting the indicator allows for these disaggregations. They have not been included in the proposed list in order to keep the list of proposed indicators to a manageable size. However the indicator could be disaggregated if needed. No change to the proposed indicator has been made.

Reviewer	Row Number	Heading	Review Comment	Response
			We also propose to disaggregate this indicator by country as we firmly believe all countries must contribute to the efforts to protect 17% of land and inland water area.	
Friends of the Earth Europe	141	Specific indicator	We fully agree on this indicator, which should be assessed fully and regularly in all its parts; supplying an overview of biodiversity related international flows, on domestic expenditures and on phasing out subsidies that are detrimental to biodiversity.  This indicator therefore provides vital information on SDG target15a, as well as on Aichi target 3.	Noted - No change required.
Friends of the Earth Europe	42629	Specific indicator	There is an undue balance between phasing out negative incentives and new and innovative finance mechanisms. The former is not comprehensive enough, the latter targeted into a dangerous direction (see below for details).	It is not clear what change is being suggested. No change has been made to the proposed list of indicators
Friends of the Earth Europe	115 ff	Specific indicator	The extent of wetlands (proposed SDG indicator for goal 6.6), suggested for Aichi target 5, is relevant here as well and could be repeated here.	Indicators have only been included in the proposed list of indicators once in order to keep the document to a manageable size. No change has been made to the proposed list of indicators.
Friends of the Earth Europe	124 ff	Specific indicator	New proposal: No of countries with national restoration plans and targets	It is not clear if this indicator exists or if it is being developed. No change to the proposed list of indicators has been made.
Friends of the Earth Europe	124 ff.	Specific indicator	New proposal: % of degraded lands restored	It is not clear if this indicator exists or if it is being developed. No change to the proposed list of indicators has been made.
Friends of the Earth Europe	30-31	Generic indicator and specific indicators	The term "forest" as used by FAO also includes alien species monoculture plantations. It is not well correlated to biodiversity per se, not to the natural habitats addressed by Aichi target 5, as it includes a big and increasing part of artificial/non-natural habitats.	The majority of the proposed indicators have limitations. These limitations should be acknowledged when the indicator is used. It is not clear if the suggested indicators exist or if they are being actively developed. In addition this is not the only indicator being suggested for this target. No change has been made to the

Reviewer	Row Number	Heading	Review Comment	Response
			As FoE Switzerland already stated towards the SDG Indicator process, we suggest to disaggregate the indicator into: Primary forests Other naturally regenerated forests Planted forests Introduced species as subcategories of the latter 2 catgories. as defined in FAO's FRA 2015 Terms and definitions: http://www.fao.org/docrep/017/ap862e/ap862e00.pdf p.7-8.  Rationale:	proposed list of indicators.
			"For achieving successful conservation and sustainable development outcomes it is essential to establish a clear differentiation between a natural forest and a monoculture tree plantation. Monoculture tree plantations should be excluded from 'forest area percentages' and the FAO definition of forests should be updated accordingly as it does not capture ""conservation, restoration and sustainable use"" as set out in the target."	
Friends of the Earth Europe	79-87	Specific indicator	"Ppm of Climate gases (CO2, CH4, NOx) in the atmosphere" as the main anthropogenic pressure – data are available by IPCC and Meteorological organisations	The proposed indicator does not address the target. The target is about reducing other anthropogenic pressures on ecosystems vulnerable to climate change and ocean acidification.
Global Forest Coalition (GFC) and ICCA Consortium	0	0	The final deadline to finalize the list of the SDGS indicators was November 30 <sup>th</sup> . After the 2 <sup>nd</sup> SDGs-IAEG meeting held in Bangkok in October, the online platform was open to all Member States, Agencies and Stakeholders (including CSOs) for three days (4-7 November) to make submissions on indicators, which was only limited to some specific indicators (coded	The SDG indicators included in the proposed list of indicators have been updated to reflect the most recent documentation for the 47th sessions of the UN Statistical Commission. Regarding the criteria used, these are the ones requested by SBSTTA.

Reviewer	Row Number	Heading	Review Comment	Response
			yellow) which had some concerns or multiple	
			proposal or modification. The aim was to	
			reclassify these indicators to either green or grey.	
			The indicators should also consider gender	
			dimensions.	
			So though it is good to build synergies and	
			linkages of the Aichi Biodiversity indicators and	
			the SDGs indicators, there are still some of the	
			SDG indicators that are on the table that have yet	
			to be agreed upon by Members States, and with	
			the Stakeholders. As some of the SDGs	
			indicators are included in the table, it is	
			important to keep a close watch on the changes	
			that will be presented as the final proposal of the	
			SDGs indicator in light of the 47th Session of the	
			United National Statistical Commission, which	
			might turn out to better accommodate and	
			address the Aichi Biodiversity Targets, but may	
			also compromise and fall short of achieving the	
			Aichi Targets. Indicators for the Aichi Targets	
			should strive for the highest possible standard,	
			rather than the lowest common denominator.	
			Reiterating the criteria considered by the	
			AHTEG on the indicators, in specific to the	
			possibility for aggregation or disaggregation of	
			data used, GFC would like to recommend to use	
			this as an overarching criteria which should be.	
			"should be disaggregated where relevant by	
			income, gender, age, race, ethnicity, migratory	
			status, disability and geographic location or other	
			characteristics, in accordance with the	
			Fundamental Principles of Official Statistics".	
			This would also complement the SDGs	
			indicators process where it was proposed in the	
			Bangkok meeting. It should however not be	

Reviewer	Row Number	Heading	Review Comment	Response
			limited if it is directly related to the indicator but should be addressed throughout as this would also ensure that the voices of all are included and are addressed.	
Global Forest Coalition (GFC) and ICCA Consortium	3	Specific Indicator (Aichi Target	This indicator as is also proposed for SDG target 4.7 is yet to be finalized as in the SDGs indicators IAEG meeting in Bangkok, there was no consensus on this indicator. More in-depth discussion still needed, or methodological development needs to be undertaken. Many different proposals for modifications were proposed.	The proposed indicators have been updated to reflect the most recent documentation prepared for the 47th session of the Un Statistical Commission. The criteria used in the assessment are those requested by SBSTTA
Global Forest Coalition (GFC) and ICCA Consortium	32	Specific Indicator (Aichi Target 5)	To put this indicator in line with the one proposed for SDG target 6.6, the indicator should be changed from "percentage of change in wetlands extent over time" to "Percentage of change in fresh water ecosystems", which was agreed as during the 2 <sup>nd</sup> SDGs-IAEG meeting held in Bangkok in September 2015.	The proposed indicators have been updated to reflect the most recent documentation prepared for the 47th session of the Un Statistical Commission.
Global			The percentage of land that is degraded over total land area should also include an analysis of the percentage of root cause of land degradation over total land area such as industrial bioenergy production, industrial agriculture and the livestock industry.	
Forest Coalition (GFC) and ICCA Consortium	36	Specific Indicator (Aichi Target 5)	In contrast with intensive, large-scale and industrial agriculture, special consideration should be given to Indigenous peoples' traditional practices of shifting and rotational cultivation, which have been found to be sustainable and even contribute to restoration and increased local biodiversity over the long-term. Such Indigenous systems are often incorrectly blamed for land degradation by national governments and Western scientists who do not	It is not clear if the proposed indicator currently exists or is being actively developed. No change to the proposed list of indicators has been made.

Reviewer	Row Number	Heading	Review Comment	Response
			understand the centuries-old wisdom underpinning these practices.	
Global Forest Coalition (GFC) and ICCA Consortium	40	Generic Indicator and Specific Indicator (Aichi Target 6)	None of the Generic Indicators concern indigenous peoples and local communities, despite their significant dependence on marine resources and vested interest in ensuring sustainable management and harvesting. There is extensive documentation of customary marine and coastal stewardship and governance systems such as <i>satoumi</i> (Japan) and <i>taboo</i> sites (Pacific Islands) and recognition around the world of Locally Managed Marine Areas.  A suggested new Generic Indicator is: "Trends in proportion of area of coastal and marine areas within national jurisdiction under indigenous peoples' and community conserved territories, areas and practices"  Suggested Specific Indicators for that Generic Indicator are: "Areas of coastal and marine areas within national jurisdiction under indigenous peoples' and community conserved territories, areas and practices" and/or "Percentage of coastal and marine areas within national jurisdiction under indigenous peoples' and community conserved territories, areas and practices" and/or "Percentage of coastal and marine areas within national jurisdiction under indigenous peoples' and community conserved territories, areas and practices"	It is not clear if the proposed indicator currently exists or is being actively developed. No change to the proposed list of indicators has been made.
Global Forest Coalition (GFC) and ICCA Consortium	47	Specific Indicator (Aichi Target 6)	We propose to include the indicator developed by the Biodiversity Indicators Partnership (BIP) to measure increasing or decreasing threats to fish biodiversity.	It is not clear if the proposed indicator currently exists or is being actively developed. No change to the proposed list of indicators has been made.
Global Forest	52	Specific Indicator	Sustainable agricultural practices should include indicators and data on:	It is not clear if the proposed indicator currently exists or is being actively developed. No change

Reviewer	Row Number	Heading	Review Comment	Response
Coalition (GFC) and ICCA Consortium		(Aichi Target 7)	Percentage of agricultural areas under small-scale, subsistence and agro-ecological farming and contributing to short-circuit and local markets; and Percentage (or number) of Indigenous and local varieties and breeds and their genetic resources (i.e. agro-biodiversity and cultural heritage developed over generations and centuries) protected, recognized and conserved. Sustainable agriculture must rely on differentiated products, services and processes rooted in unique cultures and societies, and not in economies of scales (where big producers will almost always squeeze out small and subsistence producers).	to the proposed list of indicators has been made.
Global Forest Coalition (GFC) and ICCA Consortium	56	Specific Indicator (Aichi Target 7)	Sustainable Forest Management is a complex but very important objective, which has environmental, social, cultural and economic dimensions and needs to be clearly defined. It needs to be part of the indicators, but with the commitment to improve the concept in the coming years. It should ensure customary rights of indigenous peoples and forest communities as part of the definition. Clear-cutting a primary forest cannot be considered sustainable, even if it is reforested afterwards.  This indicator also overlaps with proposed indicator for SDG 15.2, which is yet to be agreed upon.	It is not clear what change is being suggested. No change to the proposed list of indicators has been made.
Global Forest Coalition (GFC) and ICCA Consortium	57	Specific Indicator (Aichi Target 7)	We propose deletion of "Net" so that it reads: "Permanent Forest loss". This indicator also overlaps with proposed indicator for SDG 15.2, which is yet to be agreed upon.	The indicator wording has been updated to reflect the most recent document for the 47th session of the UN Statistical Commission.
Global	82	Specific	Pressures on coral reefs should also address	It is not clear if the proposed indicator exists or is

Reviewer	Row Number	Heading	Review Comment	Response
Forest Coalition (GFC) and ICCA Consortium		Indicator (Aichi Target 10)	industrial pressures such as bottom-trawling and downstream or knock-on pressures such as fish bombing, which is arguably precipitated by industrial fishing offshore and near coastal areas. Suggested Specific Indicator: "Trends in legal or policy measures to reduce pressures on coral reefs, including industrial fishing and bottom-trawling".  There could also be a Specific Indicator on alternative livelihood / economic opportunities, for example: "Trends in alternative livelihood generation for local fisherfolk".  In addition, there could also be a Specific Indicator on community conservation initiatives and on other specific ecosystems such as mangroves and seagrass beds, for example: "Area (or percentage) of original extent of mangroves and seagrass beds restored through collective action and community conservation initiatives".	being developed. No change to the proposed list of indicators has been made.
Global Forest Coalition (GFC) and ICCA Consortium	97	Specific Indicator (Aichi Target 11)	Drawing on extensive work by IUCN, GIZ, the ICCA Consortium and others on governance of protected and conserved areas, there should also be a Specific Indicator such as: "Governance quality of protected and conserved areas".  Reference may be made to 2013 IUCN guidelines on governance of protected areas and to 2015 Worboys et al ("Protected Area Governance and Management").	It is not clear if the proposed indicator exists or is being developed. No change to the proposed list of indicators has been made.
Global Forest Coalition (GFC) and	108	Generic Indicator (Aichi Target 13)	This Generic Indicator only refers to ex-situ crop collections, but an extraordinary diversity of cultivated plants is found in-situ, particularly among Indigenous peoples and local	It is not clear if the proposed indicator exists or is being developed. No change to the proposed list of indicators has been made.

Reviewer	Row Number	Heading	Review Comment	Response
ICCA Consortium			communities. Suggested additional Specific Indicator: "Community biodiversity registers of in-situ crop diversity"	
Global Forest Coalition (GFC) and ICCA Consortium	109	Specific Indicator (Aichi Target 13)	The Generic Indicator refers to farmed and domesticated animals, but the Specific Indicator refers to crops and breeds and their wild relatives. It should only refer to breeds and their wild relatives.	The indicator is a proposed SDG indicator and addresses multiple issues. It has been placed under the generic indicator that it is most relevant to. No change to the proposed list has been made.
Global Forest Coalition (GFC) and ICCA Consortium	112	Generic Indicator (Aichi Target 13)	If this Generic Indicator on "Trends in protected area coverage of wild relatives" is retained in some form, we suggest that it be revised to the following: "Trends in effectively conserved area coverage of farmed, domesticated and wild relatives". Effectively conserved areas may fall under a wide range of management categories and objectives and thus may include not only wild relatives, i.e. could include livestock husbandry, pastoralism, cultivation, gathering of wild plants, etc. Often indigenous peoples' territories (especially nomads and pastoralists) cover vast areas though the human and animal populations are generally very low density.	The generic indicator is by design broad. No change to the proposed list of indicators has been made.
Global Forest Coalition (GFC) and ICCA Consortium	113	Specific Indicator (Aichi Target 13)	Suggested Indicator: "Species protection and conservation of Indigenous and local varieties and breeds and their genetic resources, and the associated traditional knowledge and cultural heritage that developed them over generations and centuries"	It is not clear if the proposed indicator currently exists or is being actively developed. No change to the proposed list of indicators has been made.
Global Forest Coalition (GFC) and ICCA Consortium Global	121	Specific Indicator (Aichi Target 14) Specific	Suggested Indicator: "Percentage (or area) restored by Indigenous peoples and local communities, including through traditional and indigenous knowledge systems"  The Indicators concerning the needs of women,	It is not clear if the proposed indicator currently exists or is being actively developed. No change to the proposed list of indicators has been made.  It is not clear if the proposed indicator currently

Reviewer	Row Number	Heading	Review Comment	Response
Forest Coalition (GFC) and ICCA Consortium		Indicator (Aichi Target 14)	indigenous and local communities, and the poor and vulnerable are very limited. Suggested Indicators:  "Percentage of population practicing customary laws and traditions"  "Self-reported multiple values and uses of ecosystem services and functions"	exists or is being actively developed. No change to the proposed list of indicators has been made.
Global Forest Coalition (GFC) and ICCA Consortium	123	Specific Indicator (Aichi Target 14)	The population should be disaggregated (refer to Comment 0) to analyse access to ecosystem services among different and diverse populations.	The proposed indicator is an SDG indicator. It is not clear what change is being suggested. No change has been made to the proposed list of indicators.
Global Forest Coalition (GFC) and ICCA Consortium	124	Specific Indicator (Aichi Target 15)	Suggested Indicators:  "Voluntary contributions, including of indigenous peoples and local communities and women, to climate change mitigation and adaptation"  "Observed changes in species populations and distributions"  "Number of countries with national restoration strategies, plans and targets"  "Percentage of degraded lands restored with native species"	It is not clear if the proposed indicator currently exists or is being actively developed. No change to the proposed list of indicators has been made.
Global Forest Coalition (GFC) and ICCA Consortium	128	Specific Indicator (Aichi Target 16)	Implementation of the Nagoya Protocol must be done in good faith and with due process, especially when engaging with indigenous peoples and local communities to access their knowledge and/or genetic resources. There should be additional indicators pertaining to community-specific and process-oriented provisions of the Nagoya Protocol.  Suggested Indicator: "Number of community	It is not clear if the proposed indicator currently exists or is being actively developed. No change to the proposed list of indicators has been made.

Reviewer	Row Number	Heading	Review Comment	Response
			protocols being developed to clarify processes for free, prior and informed consent and establishment of mutually agreed terms"	
Global Forest Coalition (GFC) and ICCA Consortium	132	Specific Indicator (Aichi Target 18)	This proposed indicator for SDG 5.a) is yet to be agreed upon.	The SDG indicators included in the proposed list of indicators have been updated to reflect the most recent documentation for the 47th sessions of the UN Statistical Commission.
Global Forest Coalition (GFC) and ICCA Consortium	133	Specific Indicator (Aichi Target 18)	Suggested Indicator: "Number of traditional occupations: land-use change and land tenure in the traditional territories of indigenous peoples and local communities"	It is not clear if the proposed indicator currently exists or is being actively developed. No change to the proposed list of indicators has been made.
Global Forest Coalition (GFC) and ICCA Consortium	134	Specific Indicator (Aichi Target 18)	Suggested Indicator: "Number of national action plans and legislations that support and recognize indigenous peoples, and particularly the UN Declaration on the Rights of Indigenous Peoples (UNDRIP)"	It is not clear if the proposed indicator currently exists or is being actively developed. No change to the proposed list of indicators has been made.
Global Forest Coalition (GFC) and ICCA Consortium	42559	Specific Indictor (Aichi Target 2)	The indicators should not only address monetary values of biodiversity but also include social, cultural, spiritual, environmental, and other values. It should take into account recognition of Indigenous peoples' and community conserved territories and areas (ICCAs) and full and effective participation of indigenous peoples and local communities in the development plans. Note that the proposed indicator also for SDG target 15.9 is not yet agreed upon. (Row 7)	It is not clear what additional indicator is being suggested or if it currently exists. No change to the proposed list of indicators has been made.
Global Forest Coalition (GFC) and ICCA	42720	Specific Indicator (Aichi Target 3)	The current specific indicators for "Trends in development and application of incentives that promote biodiversity conservation and sustainable use" focus solely on financial and market-based incentives. While such incentives	Some of the proposed indicators are reflected in the resource mobilization reporting framework referred to under Aichi Biodiversity Target 20. For the additional proposed indicators it is not clear if these currently exist or are being

Reviewer	Row Number	Heading	Review Comment	Response
Consortium			can play a role in promoting biodiversity conservation and sustainable use, they can also lead to perverse incentives and are not sufficient to address the key aim of the Target – identifying and removing perverse incentives. Friends of the Earth Europe has identified the following possible indicators, which we support:  Number of countries that have identified incentives and subsidies potentially harmful for biodiversity (following CBD reporting obligations in the implementation of CBD decisions X/2 and XII/3)  Number of countries that have developed plans to phase these out (as indicated in Annex I of decision CBD/COP/DEC/XII/3, notably No.1(a))  Number of countries that have phased out such incentives and subsidies  (Amount of) subsidies redirected towards support for biodiversity  The indicators should also provide for nonmarket-based mechanisms. An effective, sustainable and cost-effective non-market-based mechanism is appropriate recognition and support for Indigenous peoples' and community conserved territories and areas (ICCAs) and other community conservetion initiatives. A suggested additional specific indicator to accommodate this consideration is: "Number of countries with national instruments recognizing and supporting indigenous peoples' and community conserved territories and areas (ICCAs) and/or other forms of community conserved territories and areas (ICCAs) and/or other forms of community conserved territories and areas (ICCAs) and/or other forms of community conserved territories and areas (ICCAs) and/or other forms of community conserved territories and areas (ICCAs) and/or other forms of community conserved territories and areas (ICCAs) and/or other forms of community conserved territories and areas (ICCAs) and/or other forms of community conserved territories and areas (ICCAs) and/or other forms of community conserved territories and areas (ICCAs) and/or other forms of community conserved territories and areas (ICCAs) and/or other forms	developed. No change has been made to the proposed list of indicators.
Global Forest	30-31	Specific Indicator	There is a fundamental concern with FAO's definition of "forests", which is far too broad and	Some of the proposed indicators are included in the resource mobilization framework related to

Reviewer	Row Number	Heading	Review Comment	Response
Coalition (GFC) and ICCA Consortium		(Aichi Target 5)	unspecific and needs to be revisited. Its definition of "forests" does not include any components concerning forest biodiversity (or conservation, restoration and sustainable use thereof, as set out in the Target) and continues to allow for monoculture tree plantations. Without this precision, expansion of monoculture plantations under the guise of "forests" could legitimize deforestation of primary and secondary forests and further degradation of other terrestrial ecosystems.  The specific indicators of forest extent and forest area as a percentage of total land area should be disaggregated into the following: primary forests, other naturally regenerated forests / secondary forests, and planted forests, with introduced species as sub-categories of the latter two categories.  Note that this proposed indicator for SDG 15.1 has yet to be agreed upon.	Aichi Biodiversity Target 20. It is not clear if the additional proposed indicators exist or if they are being actively developed. No change to the proposed indicators have been made
Global Forest Coalition (GFC) and ICCA Consortium	88-100	Generic and Specific Indicators (Aichi Target 11)	Coverage of protected areas should also recognize and ensure areas of high natural and cultural value are protected and conserved in locally appropriate manners (e.g. through Indigenous peoples' and community conserved territories and areas (ICCAs) and other culturally appropriate systems), including marine ICCAs.  The IUCN and the CBD now encourage all countries to appropriately recognize and support ICCAs, due to their importance for equitable governance, sound management of biodiversity and ecosystem services, minimizing environmental hazards, and mitigating climate change, among other things. ICCAs are central to	It is not clear if the proposed indicator exists or is being developed. No change has been made to the proposed list of indicators.

Reviewer	Row Number	Heading	Review Comment	Response
			community empowerment, livelihoods and socio- ecological resilience as well as ensuring the well being of millions of people and the conservation of about one-third of the global ecosystems (terrestrial and aquatic).	
			Suggested changes to current Specific Indicators: all Indicators should refer to "effectively conserved areas", not only "protected areas". There is an emerging body of work on "other effective area-based conservation measures" ("conserved areas" in short), which are distinct from protected areas.	
Global Forest Coalition (GFC) and ICCA Consortium	88-100	Generic and Specific Indicators (Aichi Target 11)	There are not yet any indicators specifically referring to "other effective area-based conservation measures", a significant element of Target 11.  Suggested Generic Indicator: "Trends in recognition of other effective area-based conservation measures".  Suggested Specific Indicators include: "Trends in policy and legal measures for recognising and supporting other effective area-based conservation measures" "Trends in recognition of ICCAs and other community conservation practices that effectively contribute to conservation regardless of primary objectives" "Percentage of terrestrial and inland water and coastal and marine areas under self-designated effective area-based conservation measures" "Percentage of terrestrial and inland water and coastal and marine areas under government-recognised effective area-based conservation measures" Reference may be made to 2012 Kothari et al	It is not clear what indicator is being proposed, if it exists or if it is being developed. No change made to the proposed list of indicators.

Reviewer	Row Number	Heading	Review Comment	Response
			(CBD Technical Series No. 64) and the WCMC ICCA Registry, among others.	
GNIS	109	Trends in genetic diversity of farmed and domesticated animals	Inconsistency with the specific indicator which covers also the local crops.	The indicator is a proposed SDG indicator. The list of indicators has been updated to reflect the documentation for the 47th sessions of the United Nations Statistical Commission.
GNIS	114	Trends in development and implementation of strategies for minimising genetic erosion and safeguarding genetic diversity	In addition to the level of implementation of GPAs on GR for food and agriculture, the implementation of the ITPGRFA (International Treaty on plant genetic resources for food and agriculture) could be added.	It is not clear if an indicator exists or if one is being developed. No change has been made to the proposed list of indicators.
India	4	Generic indicator	Identification and/or development of additional alternative indicators may be considered to monitor trends in public engagement with biodiversity.	No change made to the proposed list of indicators as no change is suggested in the comment.
India	27	Generic indicator	Monitoring and reporting on urban biodiversity may be supported through guidance on existing (e.g., Cities Biodiversity Index) and potential indicators which Parties may be able to apply as per their specific contexts.	No change made to the proposed list of indicators as no change is suggested in the comment. The issue of developing further guidance is noted in the SBSTTA recommendation XIX/4.
India	34	Specific Indicator	Identification and/or development of specific indicator(s) may be necessary to monitor trends in fragmentation of forest and other natural habitats.	No change made to the proposed list of indicators as no change is suggested in the comment.
India	58	Generic Indicator	For production landscapes particularly forestry, monitoring trends in populations of forest-specialist species requires development of specific indicators.	No change made to the proposed list of indicators as no change is suggested in the comment.

Reviewer	Row Number	Heading	Review Comment	Response
India	115	Generic indicator	Trends in safeguarding ecosystem services that provide essential services requires identification of specific indicators that can capture the health/quality of the ecosystems and their management e.g., in addition to wetland extent, indicator(s) that consider integrated management of wetlands to ensure wetland health.	No change made to the proposed list of indicators as no change is suggested in the comment.
India	127	Specific indicator	Supporting information and guidance is needed on suggested specific indicator to enable States Parties to apply such indicators where feasible.	No change made to the proposed list of indicators as no change is suggested in the comment. The issue of developing further guidance is noted in SBSTTA recommendation XIX/4.
India	1-3	Specific Indicator	To monitor progress towards generation of awareness and attitudes to biodiversity under Aichi Target 1, indicators in application such as the Biodiversity Barometer may not yet have adequate geographical coverage to reflect changes at the global level. Moreover, a specific indicator may not capture the efforts and actions taken by Parties towards achievement of the Target. Therefore, development of additional alternative indicators may be considered.	The limitations of the indicator are noted. However the indicator has been previously used and is included in the Biodiversity Indicators Partnership. The limitations of the indicator should be noted when it is used. No change made to the proposed list of indicators.
India	9-16	Specific Indicator	Indicators for reforming incentives/subsidies to minimize or avoid negative impacts on biodiversity, and encouraging development and application of positive incentives for the conservation and sustainable use of biodiversity need further explanation through guidance on data requirement and methodology for monitoring towards such indicators.	No change made to the proposed list of indicators as no change is suggested in the comment. The issue of developing further guidance is noted in the recommendation from SBSTTA and applies to most of the proposed indicators.
India	132-135	Generic indicator and Specific indicator	Community-based monitoring and information systems have been recognised as important sources of knowledge that can inform monitoring and reporting at the local, national and global levels towards Aichi Target 18 and related provisions of the CBD as well as national	No change made to the proposed list of indicators as no change is suggested in the comment. The issue of developing further guidance is noted in the SBSTTA recommendation XIX/4.

Reviewer	Row Number	Heading	Review Comment	Response
			strategies and action plans. Detailed guidance would be useful on the current practice and further development of relevant indicators.	
India	136-140	Generic indicator and Specific indicator	Identification of generic and specific indicators and guidance on the same is required as indicators suggested may be inadequate in scope and coverage.	No change made to the proposed list of indicators as no change is suggested in the comment. The issue of developing further guidance is noted in the SBSTTA recommendation XIX/4.
India	17-29	Generic indicator	Opportunities for access to globally aggregated data that can be disaggregated at national and sub-national levels should be explored so that Parties may analyse available data for measuring progress towards the target.	No change made to the proposed list of indicators as no change is suggested in the comment.
India	59-70	Generic indicator	To monitor trends in pollution, including from excess nutrients, data is likely to be available for many countries. However, aggregation of national data to inform global indicators needs further effort.	No change made to the proposed list of indicators as no change is suggested in the comment.
India	71-78	Generic indicator and Specific indicator	Providing support to Parties for monitoring invasive species particularly in the marine realm may be considered, as information in this regard is limited.	No change made to the proposed list of indicators as no change is suggested in the comment.
India	82-83	Specific indicator	Efforts towards identification and development of specific indicators are required.	No change made to the proposed list of indicators as no change is suggested in the comment.
India	86-87	Specific indicator	Efforts towards identification and development of specific indicators are required.	No change made to the proposed list of indicators as no change is suggested in the comment.
IRD	40		The trends in certified fisheries by the MSC does not deliver a clear message. It is strongly biased as the MSC initiative is recent, so will increase even without any change in the way fisheries are managed. In contrast to what is claimed, the MSC certification is also reinforcing fisheries which can pay for the labelling costs. Incentives for fisheries from developing countries, or small	This indicator, like many, has limitations which should be acknowledged when it is used. The indicator has been previously used in GBO-3 and GBO-4. No change to the proposed list of indicators has been made.

Reviewer	Row Number	Heading	Review Comment	Response
			scale artisanal fisheries are insufficient to provide a balanced and equitable assessment of sustainable exploitation at the global scale.	
IRD	41	Generic Indicator	Needs to be reformulated as not clear as is. I suppose the indicator is meant to capture the proportion of depleted stocks (target or bycatch) with recovery plans.  The notion of depleted stock and its quantification is not easy in developing countries. Also, this indicator will not perform well (sensitivity, or as a comparative indicator across ecosystems) as the absolute nb of depleted	The generic indicator is by its nature broad. The generic indicators relates to the specific elements of the Aichi Biodiversity Target. No change has been made to the proposed list of indicators
			stocks will be low (statistically speaking) in many ecosystems.	
IRD	44	Specific Indicator	Living Planet Index: not easy to communicate as the name of the indicator does not reflect the content. The proportion of declining species (species with decreasing biomass) would be more straightforward. The NDES indicator (non-declining exploited species), studied by the IndiSeas Working Group, has been recently tested in several marine ecosystems (Kleiner et al. 2015, DOI: 10.1016/j.ecoser.2015.02.002). It relies on fisheries-independent survey data (biomass index by species) that are collected routinely in many ecosystems.	It is not clear what change is being suggested. The Living Planet Index, like other indicators, has limitations which should be acknowledged when it is used. The LPI has been used in GBO-3 and GBO-4. The geographic coverage of the indicator suggested in the review comment is not clear nor is the status of its development status. No change to the proposed list of indicators has been made.
IRD	47	Easy to communicate	This indicator is easy to communicate	The geographic coverage or the indicator and its level of development are not clear. No change to the proposed list of indicators has been made
IUCN	17	Source	Change to "IUCN, BirdLife International and other Red List Partners".	Change made
IUCN	17	Specific indictor	Insert "Proposed indicator for SDG Targets 12.1 and 15.7".	The proposed SDG indicators have been updated to reflect the documentation prepared for the 47 <sup>th</sup> session of the United Nations Statistical Commission.

Reviewer	Row Number	Heading	Review Comment	Response
IUCN	37	Source	Change to "IUCN, BirdLife International and other Red List Partners".	Change made
IUCN	42	Source	Change to "IUCN and other Red List Partners".	Change made
IUCN	43	Source	Change to "IUCN, BirdLife International and other Red List Partners".	Change made
IUCN	43	Specific indictor	Insert "Proposed indicator for SDG Target 14.4".	The list of indicators has been updated to reflect the documentation for the 47th sessions of the United Nations Statistical Commission
IUCN	64	Easy to communicate	Should be scored "X" rather than blank, as with other RLIs.	Change made
IUCN	64	Source	Change to "IUCN, BirdLife International and other Red List Partners".	Change made
IUCN	75	Source	Change to "IUCN, BirdLife International and other Red List Partners".	Change made
IUCN	75	Specific indictor	Insert "Proposed indicator for SDG Target 15.8".	The list of indicators has been updated to reflect the documentation for the 47th sessions of the United Nations Statistical Commission
IUCN	80	Source	Change to "IUCN and other Red List Partners".	Change made
IUCN	85	Source	Change to "IUCN, BirdLife International and other Red List Partners".	Change made
IUCN	85	Specific indictor	Insert "Proposed indicator for SDG Target 13.1".	Change made
IUCN	94	Source	Change to "WCMC".	Change made
IUCN	101	Source	Change to "IUCN, BirdLife International and other Red List Partners".	Change made
IUCN	102	Source	Change to "IUCN, BirdLife International and other Red List Partners".	Change made
IUCN	103	Source	Change to "IUCN, BirdLife International and other Red List Partners".	Change made
IUCN	110	Source	Change to "IUCN, BirdLife International and other Red List Partners".	Change made
IUCN	110	Specific indictor	Insert "Proposed indicator for SDG Target 2.5".	The list of indicators has been updated to reflect the documentation for the 47th sessions of the United Nations Statistical Commission
IUCN	116	Available	Change "Y" to "X" – RLIs have been published	Change made

Reviewer	Row Number	Heading	Review Comment	Response
		today (X) or under active development (Y)	for pollinators (Regan et al. 2015).	
IUCN	116	Easy to communicate	Should be scored "X" rather than blank, as with other RLIs.	Change made
IUCN	116	Global indicator can be disaggregated to create national indicator	Should be scored "X" rather than blank, as with other RLIs.	Change made
IUCN	116	Source	Change to "IUCN, BirdLife International and other Red List Partners".	Change made
IUCN	88–90	Source	Change "WDPA" to "WCMC & IUCN".	Change made
IUCN	91 & 92	Specific indictor	Insert "Proposed indicator for SDG Targets 14.5, 15.1, and 15.4".	The list of indicators has been updated to reflect the documentation for the 47th sessions of the United Nations Statistical Commission
IUCN	General	Available today (X) or under active development (Y)	IUCN supports the inclusion of this column: it is very important to distinguish between those indictors for which methods and results have been peer-reviewed and published versus those that are described concepts but that have not yet been operationalised, peer-reviewed, and/or published in the scientific literature.	Noted
IUCN	General	General	With respect to the request that "reviewers may also wish to comment onif the indicator relies on data sets which are open access", the data underlying all indicators which include "IUCN" in the "Source" column are indeed open for non-commercial use, within their respective Terms of Use documents, and further to IUCN's "Framework of Principles for Managing Biodiversity Conservation Data and Information" (http://www.iucnredlist.org/documents/Annex_1	Noted

Reviewer	Row Number	Heading	Review Comment	Response
			4_to_Decision_C_78_23_Framework_of_Princip les_for_Managing_Biodiversity_Data.pdf) and "Annex 15 to Decision C/78/24 Policy for Commercial Use of IUCN Biodiversity Data" (http://www.iucnredlist.org/documents/Annex_1 5_to_IUCN_Council_Decision_C78_24_Policy_for_Commercial_Use_of_IUCN_Data.pdf). A summary reference for the indicators which include "IUCN" in the "Source" column is "Harnessing biodiversity and conservation knowledge products to track the Aichi Targets and Sustainable Development Goals" Biodiversity 16 (2-3): 157-174; www.tandfonline.com/doi/full/10.1080/1488838 6.2015.1075903.	
IUCN	General	Multiple	Indicators scored as blank or Y in the column "Available today (X) or under active development (Y)" are not scored for their ease of communication and global/national disaggregation. IUCN is supportive of this approach – it is not possible to evaluate ease of communication or global/national disaggregation for indicators which do not yet exist.	Noted
IUCN	General	Specific indicator	Update table to reflect current proposals for SDG indicators.	Change made
IUCN	General	Used in GBO3 & 4	IUCN supports the emphasis on building on existing indicators. Indicators published in GBO3 and/or GBO4 have wide acceptance, are familiar to Parties and have established institutional backing and delivery. While incorporating new indicators based on new datasets and emerging technology is useful, especially where generic indicators have no specific indicators proposed, it is important to avoid duplication or effort.	Noted
Japan	0	0	Japan acknowledges that this peer review is to	SBSTTA recommendation XIX/4 notes that the

Reviewer	Row Number	Heading	Review Comment	Response
			update and revise the proposed list of global indicators for the Strategic Plan for Biodiversity 2011-2020; however, we would like to note that Japan will not be able to apply all the indicators into monitoring of national implementation for the SP even when this list is fixed and adopted by the COP. Japan will consider flexible application of the indicators depending on our current situation and circumstances, as appropriate. According to our view mentioned above, we reviewed the proposed list from a technically neutral position.	indicators should be adapt to national priorities and circumstances. No change made to the proposed list of indicators.
			Japan considers that the IUCN Red List is not appropriate to monitor progress of Japan's outcomes for the achievement of the Aichi Biodiversity Targets because there is a significant difference of designated species between the IUCN Red List and the Japanese Red List. When reporting the progress such as in the sixth national report, we will use the Japanese Red List.	
			There are some indicators that are close to or same as other indicators. Thus, such duplication should be avoided. Details of this point are mentioned in the following cells.	
Japan	2		The data of Google trends can be obtained for each country as well, and therefore the global data can be disaggregated to create national data. In this regard, the cell of "global indicator can be disaggregated to create national indicator" could be filled with "X".	Change made
Japan	3		As alternative suggestions, "percentage of schools that have mandatory courses about environmental issues" and/or "percentage of	The list of indicators has been updated to reflect the documentation for the 47th sessions of the United Nations Statistical Commission The

Reviewer	Row Number	Heading	Review Comment	Response
			university students who major in environmental sciences or related subjects" could be considered. Such data might be easier to acquire than the suggested indicator (proposed indicator for SDG target 4.7), considering that this proposed indicator is categorized as grey.	additional proposed indicator has not been included as it is not clear if the indicator exists, who is developing it and/or who is maintaining or developing the data set.
Japan	8		The suggested indicator is not an indicator, and the words of "number of countries" may be added at the beginning.	Change made
Japan	9		The definition of "Trends in the number and value" is unclear. It is not possible to count the number of harmful incentive measures while the parameter is unknown. Also, there could be other harmful incentives that are newly implemented. How the "value" is expressed needs to be clarified.	Change made. Indicator removed and modified to reflect wording of OECD indicator.
Japan	10		The proposed specific indicator, "Trends in potentially harmful elements of government support to agriculture", should be deleted. It is not clear what "harmful elements" means and how to identify "harmful elements" to biodiversity among government supports to agriculture.	Indicator is one developed by the OECD. The wording of the indicator reflects that used by the OECD.
Japan	11		The proposed specific indicator, "Percent change in import and export tariffs on agricultural products", should be deleted. We do not see any particular linkage between tariffs and biodiversity.	Wording modified to match that used by the OECD.
Japan	27		Many cities might be just unaware of Cities Biodiversity Index yet, but that does not mean that these cities are environmentally unfriendly. Thus, we would like to suggest adding another indicator, "the proportions of green space in urban areas and/or biodiversity-related budgets" which may be better to monitor the progress for achieving Target 4.	It is not clear if this indicator currently exists or who is developing it. It is also not clear if data exists. No change made.

Reviewer	Row Number	Heading	Review Comment	Response
Japan	30		To avoid duplication of the two specific indicators, Japan suggests integrating these into an indicator from the resource of FAO (such as FRA: Global Forest Resources Assessments).	While the indicators have similar names, they rely on different data sets and measure slightly different things. No change made.
Japan	40		Trend in MSC certified fisheries, tonnage and improvements is an inappropriate indicator. As for the fishery products certification system, it is true that many fishermen get the MSC certification, but there are a lot of certification systems other than MSC in the world.  In addition, many fishermen do not try getting fisheries production certification due to the high cost with small benefit, even if their fishing operations are conducted in a sustainable manner.	The indicator, like many of those proposed, has limitations. These limitations need to be acknowledged when the indicators are used. This was the approach used in GBO-3 and GBO-4 which made use of this indicator. The indicator has been retained.
Japan	45		The fishing activities by bottom trawling do not necessarily induce the destruction of marine ecosystem. Not only bottom trawling but also all fisheries may affect the marine ecosystem including all fish and invertebrate stocks and aquatic plants, if they are not managed appropriately.  Trawl fisheries are relatively well managed fisheries, setting of total allowable catch based on stock assessment and establishing marine preserve. Also, some trawl fishermen have got MSC and other types of certifications.	The generic indicator associated with this specific indicator has been modified. The word destructive has been removed to not imply that all bottom trawling is destructive.
Japan	46		Although "fisheries subsidies" has been discussed in the WTO, a consensus has not yet been formed about its definition and rules. Therefore, row number 46 "Dollar value of negative fishery subsidies against 2015 baseline" should be deleted.	The list of indicators has been updated to reflect the documentation for the 47th sessions of the United Nations Statistical Commission
Japan	48		The estimated fisheries catch is affected by socioeconomic factors such as a taste of	Trends in fish stocks is included in the list. Fisheries catch and efforts is an existing

Reviewer	Row Number	Heading	Review Comment	Response
			consumers and price as well as a stock status.  Therefore, a stock trend is a better indicator than "estimated fisheries catch and fishing effort".	indicator. It has been published and was used in GBO-4. Like all indicators, it has limitations and these limitations should be acknowledged when it is used. No change made to the proposed list.
Japan	49		A catch documentation scheme or similar traceability system is used as a purpose to certify that the fish were caught legally or to carry out distribution management. It is difficult to grasp catch per unit effort by using percentage of catches that are subject to a catch documentation scheme or similar traceability system. Therefore, it is inappropriate to use a catch documentation scheme as an indicator.	The list of indicators has been updated to reflect the documentation for the 47th sessions of the United Nations Statistical Commission
Japan	54		There are many fishery production certification programs. However, many fishermen do not try getting fisheries production certification due to the high cost with small benefit, even if their fishing operations are conducted in a sustainable manner. Therefore, it is inappropriate to use it as an indicator.	The indicator, like many of those proposed, has limitations. These limitations need to be acknowledged when the indicators are used. This was the approach used in GBO-3 and GBO-4 which made use of this indicator. The indicator has been retained.
Japan	71		We suggest two databases as sources. "NIES IAS Database" covers IAS information of Japan. At the same time, because many countries/regions have their original databases, we think integration of these databases is necessary.  source: IUCN Global Invasive Species Database, NIES IAS Database (http://www.nies.go.jp/biodiversity/invasive/inde x_en.html)	While the database exists, it is not clear is there is an available indicator or one under development. For this reason no change has been made to the proposed list.
Japan	72		For instance, "the number of countries that have identified and prioritized IAS "nationally" could be a proposed indicator here. As well, if possible, the number of countries that have early detection systems about IASs may be useful, because most countries may have just listed IASs without early	While the database exists, it is not clear if there is an available indicator or one under development. For this reason no change has been made to the proposed list.

Reviewer	Row Number	Heading	Review Comment	Response
			detection and removal systems. Development of systems for reporting new invasions of IASs was requested even in COP6 (guiding principle in Decision VI/23).	
			We suggest two databases as sources. "NIES IAS Database" covers IAS information for Japan. At the same time, because many countries/regions have their original databases, we think that the integration of these databases is necessary.	
			IUCN Global Invasive Species Database, NIES IAS Database (http://www.nies.go.jp/biodiversity/invasive/inde x_en.html)	
			It seems difficult to use a specific indicator of Row No. 72, because the way of identifying IASs for reporting trends in the distribution and populations may be different among parties. However, some global organizations/programs could calculate the percentage of IAS that expands their distributions among all IASs identified by global programs such as IUCN Database. If so, by averaging such percentage, we could detect roughly the global trend of IAS's expansions. Thus, we suggest such a percentage	
Japan	73		as a specific indicator here.  Why does this specific indicator focus on vertebrates alone? For instance, global organizations/programs could calculate the percentage of IAS that decline in distributions and/or the number due to eradication/removal among all IASs that are listed by global programs such as IUCN Database. If so, by averaging such percentage, we could detect the	The indicator focuses on vertebrates as that is the information that is currently available. While it would be ideal for the indicator to reflect other types of eradications, this information is not currently available. No change has been made to the proposed list of indicators.

Reviewer	Row Number	Heading	Review Comment	Response
			global trend of IAS's declines thanks to eradication/removals roughly. Thus, we suggest such a percentage as a specific indicator here. The assessment should be considered for inclusion of national eradication and related efforts about the designated IASs by international efforts such as IUCN Database.	
Japan	74		Not only legislations but development, establishment, and application of practical eradication measures would be an important indicator.	While the additional information would be valuable, it does not currently exists and it is not clear who is working on an indicator related to this issue. No change to the proposed list has been made.
Japan	75		This generic indicator (extinction risk by IAS) is included in the generic indicator of row no. 76 (impacts of IAS on ecosystems). Thus, we suggest integrating these two indicators.	It is not clear what change is being suggested. No change has been made to the proposed list of indicators.
Japan	76		We consider that the assessment of impacts on ecosystems is not solely dependent on the impacts of IAS but also other factors such as land change, overexploitation and pollution. The proposed generic indicators such as "Trends in extinction risk and populations driven by IAS impacts" (row No. 75) could also be derived from multiple factors. In other words, it would be difficult to collect and compile simple and schematic data such as a datum that expresses "an increase in the IAS results in a decrease in the potentially-impacted native species", and there is no information on how to assess this proposed generic indicator, "Trends in impacts of IAS on ecosystems". Thus, we would like to suggest deleting this generic indicator.	It is clear that IAS are not the only pressure on ecosystems. However IAS do affect ecosystems and in some cases can be a major determinant of ecosystem health. Therefore, even though no specific indicator currently exists, it would be valuable to have an indicator measuring the impacts of IAS on ecosystem health and integrity. The generic indicator has been retained in order to highlight that this is an issue that is in need of monitoring.
Japan	77		Specifying numerical targets of this indicator may be difficult. Increase in the number of detected introductions of IASs does not necessarily mean increase of the introductions of	It is clear that IAS are not the only pressure on ecosystems. However IAS do affect ecosystems and in some cases can be a major determinant of ecosystem health. Therefore, even though no

Reviewer	Row Number	Heading	Review Comment	Response
			IASs, because developments of detecting IASs' introduction could also lead to the increase in the number of detected introductions of IASs.	specific indicator currently exists, it would be valuable to have an indicator measuring the impacts of IAS on ecosystem health and integrity. The generic indicator has been retained in order to highlight that this is an issue that is in need of monitoring.
Japan	78		This indicator seems to be close to or the same as the indicator of "Adoption of national legislation relevant to the prevention or control of invasive alien species" (row number 74), so this specific indicator and its corresponding generic indicator could be deleted.	The list of indicators has been updated to reflect the documentation for the 47th sessions of the United Nations Statistical Commission
Japan	81		We suggest adding indicators other than ocean acidification, such as water temperature, terrestrial input, and exploitation (e.g., fishery, harvesting). Data for water temperature for coral bleaching is available as "Degree Heating Week" at NOAA, and for terrestrial input at "Reefs at risk". Source: Reefs at Risk (http://www.wri.org/publication/reefs-risk-revisited). Degree Heating Weeks (NOAA Coral Reef Watch) (http://coralreefwatch.noaa.gov/satellite/index.ph p)	The marine acidity indicator has been retained as it is a proposed SDG indicator. The additional proposed indicators have not been included as they do not directly relate to the target which is about reducing other anthropogenic pressures on vulnerable ecosystems.
Japan	82		We suggest adding "the number of legislations or action plans adopted for reduction of pressures on coral reefs" as a specific indicator. (E.g., Okinawa Prefecture Red Soil Erosion Prevention Ordinance, The Action Plan to Conserve Coral Reef Ecosystem in Japan.)	The indicator has not been added as it is not clear who is gathering the information/preparing the indicator.
Japan	83		We suggest adding "trends in the area of mangroves, tidal wetlands, and alpine vegetation". There is "World Atlas of Mangroves", and "Tropical Coastal Ecosystems Portal"(database) for mangroves. Source: World Atlas of Mangroves, Tropical Coastal Ecosystems	While there have been studies on these ecosystems. It is not clear if an indicator has been developed or who is developing one. It is also not clear how frequently the data set is updated. The reports referred to appears to be a one-time study. For these reasons no changes

Reviewer	Row Number	Heading	Review Comment	Response
			Portal (http://www.nies.go.jp/TroCEP/index.html)	have been made to the proposed list.
Japan	86		Same as row number 81. We suggest adding some quantifiable indicators on ocean acidification, water temperature, terrestrial input, and exploitation.	It is not clear if the proposed indicator exists and/or if they are being developed. No changes have been made to the proposed list of indicators.
Japan	87		Same as comments for row number 82.	The indicator has not been added as it is not clear who is gathering the information/preparing the indicator.
Japan	88		IUCN Protected Areas Categories System may enable more precise assessment of achievement of the target. Specifically, there are many protected areas that have no substantial regulations, and some scholars call them "paper parks". Thus, if percentage of areas covered with protected areas of Category I (of IUCN's system) can be calculated globally, we could know our progress for the target in terms of substantial regulations (i.e., preservation) simultaneously.	It is not clear if the proposed indicator exists. No change to the proposed indicator list has been made.
Japan	89		IUCN Protected Areas Categories System may enable more precise assessment of achievement of the target. Specifically, there are many protected areas that have no substantial regulations, and some scholars call them "paper parks". Thus, if percentage of areas covered with protected areas of Category I (of IUCN system) can be calculated globally, we could know our progress for the target in terms of substantial regulations (i.e., preservation) simultaneously.	It is not clear if the proposed indicator exists. No change to the proposed indicator list has been made.
Japan	90		This indicator lacks data of coastal area, and similar indicator which includes coastal data is already listed in row number 89 ("Percentage of marine and coastal areas covered by protected areas"), so it should be deleted.	The indicator is a proposed SDG indicator. No changes have been made to the proposed indicator list.
Japan	92		This indicator seems to be close to or the same as the indicator of "Protected area coverage of Key	While similar, the indicators are different. The KBA indicator looks at specific categories of

Reviewer	Row Number	Heading	Review Comment	Response
			Biodiversity Areas" (row number 91), so it should be deleted.	ecosystems (for example AZE sites), the protected area overlays looks at the protected area coverage of ecosystems.
Japan	97		Same as the comments in the row 89. Such assessments may indirectly evaluate management effectiveness of protected areas.	It is not clear if the proposed indicator exists. No change to the proposed list has been made.
Japan	98		Budgets of PAs could be significantly varied depending on whether or not each PA entails land ownership. For instance, in Japan, most national parks do not entail land owning, and hence their budgets are limited in comparison with those of North America, where most areas of national parks are owned by park agencies. In this regard, chronological changes in funding/budgets of each country rather than the funding/budgets <i>per se</i> should be relevant and used as an indicator here.	The indicator has been removed from the proposed list.
Japan	100		This indicator seems to be close to or the same as the indicators of "Protected Area Connectedness Index" (row number 99), so it should be deleted.	The indicator has been removed from the proposed list.
Japan	126		"Trends in amount of carbon sequestration, as Blue Carbon, in coastal ecosystems" could be an additional indicator which provides information about condition level of coastal ecosystem on climate change. Now there are a few methods to calculate an amount of Blue Carbon. UNEP's Rapid Response Assessment "blue carbon" is useful.	It is not clear if an indicator exists or if one is being developed. The document referred to appears to be a onetime study based on other published literature.
Japan	127		For instance, percentage of protected areas that implement adaptation and/or mitigation measures against climate change could be considered as an alternative indicator. Such data could be easily understood (more easily than global ecosystem restoration index), and they could be produced at the national level, too.	It is not clear if the indicator proposed currently exists or is under development. It is not clear if data for the proposed indicator exists. No changes to the proposed list of indicators have been made.
Japan	128		The Ad Hoc Technical Expert Group on	The list of indicators has been updated to reflect

Reviewer	Row Number	Heading	Review Comment	Response
			Indicators for the Strategic Plan for Biodiversity 2011-2020 identified the draft indicators for SDGs as a useful reference for considering indicators for the Strategic Plan for Biodiversity 2011-2020. Since a draft indicator for SDGs 15.6, "Number of countries that have adopted legislative, administrative and policy frameworks for the implementation of the Nagoya Protocol", is an appropriate indicator for measuring progress on the Aichi Target 16 especially by indicating "the Protocol is in operational, consistent with national legislation", we consider this indicator should be added to the proposed list of indicators for the Strategic Plan for Biodiversity 2011-2020.	the documentation for the 47th sessions of the United Nations Statistical Commission. No change made.
Japan	131		It seems that this indicator is not satisfactory as its SDG target is "create sound policy frameworks at the national, regional and international levels, based on pro-poor and gender sensitive development strategies, to support accelerated investment in poverty eradication action". Japan would propose to move this proposed indicator for SDG target 1.b into Target 14 section as this indicator is related to gender and poverty issues.	The SDG indicator has been removed. It no longer features in the list proposed for the 47th sessions of the United Nations Statistical Commission
Japan	134		Japan would like to propose a new specific indicator, "Number of local community-based monitoring on traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity". Knowing the number of Local community-based monitoring such as the Indicators of Resilience in socioecological production landscapes and seascapes (SEPLS) developed jointly by UNU-IAS, Biodiversity International, IGES and UNDP	The indicator has been added.

Reviewer	Row Number	Heading	Review Comment	Response
			under the Satoyama Initiative would enable to understand the trends of active participation and involvement of local communities in the monitoring and integration of their traditional knowledge and practices in the implementation of the Strategic Plan. As of the Indicators of Resilience, these are already in use such as in community development project COMDEKS implemented by UNDP, their data are at local community level, and their toolkit is open access (UNEP/CBD/ID/AHTEG/2015/1/INF/10). Available today (X) or under active development (Y): X. Easy to communicate: X Source: Satoyama Initiative	
Japan	140		There is no rationale for why this indicator of the Aichi Target 19 is specifically focusing on the field of marine technology. Although the SDG target 14 is about marine issues, the indicator of the Aichi Target 19 could take into account terrestrial field as well.	The indicator has been removed.
Japan	130 and 131		We suggest adding a new specific indicator, "Number of local biodiversity strategies and/or action plans formulated by subnational governments, cities and other local authorities", based on Decision X/22.	It is not clear if the indicator exists and/or who is preparing it or collecting the necessary information. The indicator has not been added.
Mexico	5	Specific Indicator	El SEEA-Experimental Ecosystem Accounting es el manual específico para la parte de biodiversidad, el número de países que ha implementado el SEEA-CF no es el mismo que el de los países que están aplicando el SEEA-EEA. Convendría hacer la especificación.	The national indicator focuses on the System of Environmental-Economic Accounting as this is the information that is available. No change to the proposed list of indicators has been made.
Mexico	9	-	Este indicador es difícil de identificar. Se podría producir utilizando los subsidios en general y restando de ellos los subsidios a las actividades productivas sustentables. La dificultad radica en que aún no existe un consenso para distinguir	The indicator has been removed from the proposed list.

Reviewer	Row Number	Heading	Review Comment	Response
			actividades sustentables de las no sustentables.	
Mexico	21	National data are aggregated to form global indicator	Existe información disponible de cuentas nacionales que permite construir los indicadores de productividad de los recursos. Esto está siendo inicialmente implementado en algunos países (como México) bajo el marco del Sistema de Contabilidad Ambiental y Económica-Agricultura, Silvicultura y Pesquería (SEEA-AFF por sus siglas en inglés).	It is not clear if the suggested indicator currently exists or is being developed. No change to the proposed list of indicators has been made.
Mexico	26	National data areaggregated to form global indicator	El indicador se puede obtener de las cuentas nacionales bajo el marco del Sistema de Contabilidad Ambiental y Económica, específicamente de las Cuentas del Agua.	It is not clear if the suggested indicator currently exists or is being developed. No change to the proposed list of indicators has been made.
Mexico	28	-	El indicador puede obtenerse del Sistema de Contabilidad Ambiental y Económica- Cuentas de Ecosistemas.	It is not clear if the suggested indicator currently exists or is being developed. No change to the proposed list of indicators has been made.
Mexico	46	-	Para calcular el indicador debe existir consenso entre las actividades sustentables y no sustentables.	In light of the documentation for the 47th session of the United Nations Statistical Commission, this indicator has been removed.
Mexico	50	Generic indicator	El SEEA-Agriculture, forestry and fisheries se está preparando pero ya existe una versión en borrador que se está circulando. Podría incluirse como indicador el número de países que aplicarían el SEEA-Agriculture.	The level of development of the suggested indicator is not clear. No change has been made to the proposed list of indicators.
Mexico	54	Source	Global Aquaculture Alliance, Aquaculture Stewardship Council	The indicator has been removed from the proposed list as it is not clear if it currently exists or is being developed.
Mexico	59	Generic indicator	Cuentas de Calidad del agua	It is not clear what change is being suggested. No change has been made to the proposed list of indicators.
Mexico	108	Specific indicator	Podría hacerse mención al cultivo de alimentos transgénicos, por el impacto que puedan llegar a tener en las variedades de semillas locales.	It is not clear if the suggested indicator currently exists or is being developed. No change to the proposed list of indicators has been made.
Mexico	132	Specific indicator	Lo mismo que arriba, por el impacto que pueda tener sobre las economías y comunidades indígenas y campesinas en general.	It is not clear if the suggested indicator currently exists or is being developed. No change to the proposed list of indicators has been made.

Reviewer	Row Number	Heading	Review Comment	Response
MUSE – Museo delle Scienze	97	Available today (X) or under active development (Y)	X	The indicator has been included in the list under "trends in extinction risk and populations of species". In order to keep the proposed list to a manageable size, indicators have only been included in the list once.
MUSE – Museo delle Scienze	97	Easy to communicate	X	The indicator has been included in the list under "trends in extinction risk and populations of species". In order to keep the proposed list to a manageable size, indicators have only been included in the list once.
MUSE – Museo delle Scienze	97	Generic Indicator	Add one more indicator under Trends in effectiveness and/or equitability of management of protected areas.	The indicator has been included in the list under "trends in extinction risk and populations of species". In order to keep the proposed list to a manageable size, indicators have only been included in the list once.
MUSE – Museo delle Scienze	97	Global indicator can be disaggregated to create national indicator	It can be, but it is limited by the number of sites in each country. As the TEAM network expands and Wildlife Insights (federated camera trap project – TEAM, CI, Smithsonian, WCS, North Carolina Museum of Natural Sciences) is implemented the number of data sets will grow.	The indicator has been included in the list under "trends in extinction risk and populations of species". In order to keep the proposed list to a manageable size, indicators have only been included in the list once.
MUSE – Museo delle Scienze	97	National data are aggregated to form global indicator	Can be, but the minimum spatial unit is of aggregation is local data (at the level of a protected area or site).	The indicator has been included in the list under "trends in extinction risk and populations of species". In order to keep the proposed list to a manageable size, indicators have only been included in the list once.
MUSE – Museo delle Scienze	97	Source	Tropical Ecology Assessment and Monitoring (TEAM) Network	The indicator has been included in the list under "trends in extinction risk and populations of species". In order to keep the proposed list to a manageable size, indicators have only been included in the list once.
MUSE – Museo delle Scienze	97	Specific Indicator	The Wildlife Picture Index (disaggregated by protected area): When calculated at the scale of a protected area, the WPI can measure the effectiveness of protected areas as actual	The indicator has been included in the list under "trends in extinction risk and populations of species". In order to keep the proposed list to a manageable size, indicators have only been

Reviewer	Row Number	Heading	Review Comment	Response
			conservation outcomes because its measures trends in biodiversity through time.	included in the list once.
MUSE – Museo delle Scienze	97	Used in GBO3/GBO4	No	The indicator has been included in the list under "trends in extinction risk and populations of species". In order to keep the proposed list to a manageable size, indicators have only been included in the list once.
MUSE – Museo delle Scienze	107	Available today (X) or under active development (Y)	X	Change made
MUSE – Museo delle Scienze	107	Easy to communicate	X	Change made
MUSE – Museo delle Scienze	107	Generic Indicator	Add one more indicator under Trends in extinction risk and populations of species	Given that the indicator is available and has been published and is reflected in the Biodiversity Indicators Partnership, the indicator has been added to the proposed list.
MUSE – Museo delle Scienze	107	Global indicator can be disaggregated to create national indicator	It can be, but currently limited by the number of sites in each country. As the TEAM network expands and Wildlife Insights (federated camera trap project – TEAM, CI, Smithsonian, WCS, North Carolina Museum of Natural Sciences) is implemented the number of data sets will grow.	As the data set is currently limited, the indicator has not been noted as being disaggregated to national level. No change made
MUSE – Museo delle Scienze	107	National data are aggregated to form global indicator	Can be, but the minimum spatial unit of aggregation is local data (at the level of a protected area or site).	As the data set is currently limited, the indicator has not been noted as being disaggregated to national level. No change made
MUSE – Museo delle Scienze	107	Source	Tropical Ecology Assessment and Monitoring (TEAM) Network	Change made
MUSE -	107	Specific	The Wildlife Picture Index: This is the only	Given that the indicator is available and has been

Reviewer	Row Number	Heading	Review Comment	Response
Museo delle Scienze		Indicator	index included within the BIP that uses in situ primary data to monitor populations of ground-dwelling mammals and birds in tropical forests (see Beaudrot et al., 2015, O'Brien et al. 2008). It fills an important geographic gap for tropical forests globally and covers a critical group of species (about 300 between mammals and birds). It is also updated in near-real time (within months of data collection)	published and is reflected in the Biodiversity Indicators Partnership, the indicator has been added to the proposed list.
MUSE – Museo delle Scienze	107	Used in GBO3/GBO4	Included in Appendixes of GBO4.	Change made
Natural Resources Institute Finland	30	Source	Trends in forest extent (forest cover) refer to the forest cover map of Hansen. This map has failed in detecting the forest cover changes in Nordic conditions. E.g. in Finland and Sweden, the in situ observations (National Forest Inventories) show that the deforestation rate estimated by the map of Hansen is not correct. It is questionable if this kind of product can be used.	The indicator has been published and was used in GBO-4. Like most indicators it has limitations which should be acknowledged when it is used. The FAO forest data, based on national submissions, is also included in the proposed list of indicators. No change made to the proposed list of indicators.
Natural Resources Institute Finland	36	Source	The biodiversity habitat index of Geobon relies on the forest cover map of Hansen. This map has failed in detecting the forest cover changes in Nordic conditions. This leads to erronous biodiversity habitat index values.	The Hansen data has been published and was used in GBO-4. The data has limitations like most indictors. These limitations need to be recognized when the data is used. The indicator is noted as being under development. No changes to the proposed indicators have been made.
New Zealand	0	0	In developing and using the Specific Indicators, consideration will need to be given to datasets with partial or increasing coverage so as not to provide a misleading description as the datasets evolve and the trends/state becomes known.	Noted
New Zealand	1	Specific indicator	We note that the Biodiversity Barometer (in effect biodiversity awareness amongst consumers) has only been used in a small number of countries to date. If this were to be	The indicator has a methodology and has previously been used in GBO-3 and GBO-4. Work is ongoing to further develop the indicator. When the indicator is used its limitations, as

Reviewer	Row Number	Heading	Review Comment	Response
			rolled out globally we would be lacking any baseline information for new countries in the first instance. Also it is not clear if this is logistically possible to do as a global indicator. We doubt if the countries presently assessed could be used as a proxy for others.	done in GBO-4, should be noted. No changes have been made to the proposed list of indicators.
New Zealand	3	Specific indicator	We have concerns as to whether or not an assessment of the level of knowledge of fifteen year olds across a range of environmental topics would be easily obtained.	The list of indicators has been updated to reflect the documentation for the 47th sessions of the United Nations Statistical Commission
New Zealand	4	Specific indicator	This indicator could provide a misleading indicator as 1) the definition of 'biodiversity-relevant' will be subjective; 2) there is likely to be individuals with memberships to multiple organisations; and 3) there will be no indication of the depth of the involvement.	The indicator has been removed from the proposed list.
New Zealand	9	Specific indicator	Again we are concerned about use of the term "trend" in a specific indicator. It would be more useful to have something like the number of subsidies phased out as a proportion of all subsidies as a more quantitative assessment.	No change made. The wording is that used by the OECD
New Zealand	10	Specific indicator	This specific indicator focuses solely on agriculture, and as such, misses diversity of other government support that may be harmful to biodiversity. An alternative would be 'status and trend (% and absolute) in elements of producer and consumer support potentially harmful to biodiversity.'	No change made. The wording is that used by the OECD
New Zealand	11	Specific indictor	The indicator for SDG target 2.b fits within an SDG related to sustainable agriculture. Proper evaluation of achievement of Target 3 will require a wider consideration than 'agriculture'.	Noted. The use of this indicator does not preclude the use of other indicators or considering issues beyond agriculture. The wording of the indicators has also been updated in light of the documentation prepared for the 47 <sup>th</sup> session of the United Nations Statistical Commission.
New	13	Specific	We are not sure what is intended by the number	The indicator has been modified to reflect

Reviewer	Row Number	Heading	Review Comment	Response
Zealand		indicator	of countries with instruments on biodiversity relevant taxes, charges and fees or how accurately this type of information could be obtained. The reference below to specific PES is much clearer and a more targeted request.	wording used by the OECD.
New Zealand	14	Specific indicator	Biodiversity conservation and sustainable management is not an end goal of the REDD+'s five activities as defined by the UNFCCC in 1/CP.16 para 70 (and subsequent decisions), and the use of this indicator will create an expectation that these elements are incorporated into their plans. This use of REDD+ needs the caveat placed upon it. This focus on REDD+ will also miss those countries with REDD+ schemes outside the UN_REDD programme, non-REDD+ schemes that achieve similar outcomes and those countries without REDD{+ in place	Noted. The majority of indicators have issues associated with their use. These should be recognized and acknowledged when they are used. No change to the proposed list of indicators.
New Zealand	17	Aichi target	We note that the reference to safe ecological limits refers to an index that not all countries understand. SEL for what – survival, reproduction, dispersal.	No change made. It is not clear what change is being suggested
New Zealand	20	Specific indicator	As an extension of comment immediately above, what is this indicator measuring? Is there an element of comparison between area and practise? That is to say, is this indicator measuring the number of countries participating in GFN's footprinting (e.g. paragraphs 3-5 on this link: http://www.footprintnetwork.org/en/index.php/GFN/page/methodology), or is it comparing the state of those footprints and how they relate to biodiversity?  If so: Ecological footprint (and similar terms that fall under environmental footprinting) is an area of study and implementation hindered by a	No change made. It is not clear what change is being suggested. For the indicator proposed it is not clear if this currently exists or if it is being developed.

Reviewer	Row Number	Heading	Review Comment	Response
			lack of methodological harmonization; there is no internationally agreed methodology or measure that can capture the global variation in ecological/environmental conditions.	
			Using one method or measure over another leads to significant variations in results and does not act as an accurate basis for comparison between regions. Would recommend instead to have an indicator concerning the investment in and study of national ecological/environmental footprinting data inputs, so as to advance the quality of data available and better serve efforts to harmonize international measures.	
New Zealand	21	Specific indicator	Re resource productivity, we are not sure how useful this is as an indicator unless it is measured against a goal such as sustainable production.  Resource productivity can drive biodiversity loss if it is not tempered by the desire for long-term sustainability. This has been highlighted as part of the SDG process.	The indicator is a proposed SDG indicator so it has been retained. The list of indicators has been updated to reflect the documentation for the 47th sessions of the United Nations Statistical Commission
New Zealand	22	Specific indicator	Re number of countries with SCP National Action plans, we believe the indicator needs to be made more action orientated (i.e. focused on implementation). For example, it could assess consumption pattern of environmental goods, increased sales of energy efficient products, etc.	The indicator is a proposed SDG indicator so it has been retained. The list of indicators has been updated to reflect the documentation for the 47th sessions of the United Nations Statistical Commission
New Zealand	24	Specific indicator	Re human appropriation of net primary productivity – we are not convinced that this tells us what is happening. An alternative measure could be to assess fisheries yield within a quota system.	The indicator does not apply to fisheries. It is not clear what indicator is being suggested and/or if it currently exists or is being developed. No change to the proposed list of indicators has been made.
New Zealand	25	Specific indicator	Human appropriation of water is an appropriate specific indicator (for the generic indicator) if it is articulated in such a way as to measure the proportion of the limit being measured (as this is	It is not clear what change is being suggested. No change has been made to the proposed list of indicators.

Reviewer	Row Number	Heading	Review Comment	Response
			inherently local). In contrast, water footprinting tends to be an absolute measure, which will provide a misleading indication of the relationship of water use to the local limit.	
New Zealand	30	Source	Would recommend FAO data (FRA) be used, because approaches such as those used in Hansen et al. (Global Forest Change) tend to mis-report temporary destocking and replanting following sustainable harvest as both a deforestation and afforestation event.	Both the Hansen data/indicator and those developed by FAO are included in the proposed list of indicators. No changes to the proposed list of indicators.
New Zealand	30	Specific indicator	'Forest extent' and 'tree cover' are not synonymous. In the context of this target, Forest extent is more appropriate.	Forest cover is the term used by Hansen etal. However the data relates to tree cover. Hansen's data and methodology have been published and has been used in several different applications as well as in GBO-4. Both tree cover (through the Hansen Data) and forest cover information provided to FAO are proposed as indicators. No change to the proposed list of indicators has been made.
New Zealand	33	Specific indicator	Re natural habitat extent: this type of indicator needs to be measured against a chosen point in time to show either an increase or decrease. We need a benchmark and a reasonably long-term dataset.	The indicator is used by the Netherlands Environmental Assessment Agency (PBL) in the development of their scenarios and models. A data set exists. The benchmark would depend on the issue being assessed. No change to the proposed list of indicators has been made.
New Zealand	37	Specific indicator	Rather than sole use of the Red List index, which not all countries have in place (e.g., many islands), we could use related national indices, provided general consistency is demonstrated.	The list of indicators is intended, primarily, for global use. It is not intended to replace the use of national indicators. The Red List is not the sole indicator being proposed for this target. It is not clear if the indicator suggested in the comment exists and/or who is developing it. No change to the proposed list of indicators has been made.
New Zealand	45	Specific indicator	We understand bottom trawling to be an umbrella term for several different fishing techniques, with varying impacts on fishing environments. "Bottom trawling" is not	The generic indicator associated with this specific indicator has been modified. The word destructive has been removed to not imply that all bottom trawling is destructive.

Reviewer	Row Number	Heading	Review Comment	Response
			determined as destructive fishing under international deepwater fishing frameworks.  More specific measure of destructive activity would serve biodiversity conservation goals. We question the use of a sole specific indicator for "destructive fishing practises" that only covers one (although broad-as above) fishing technique.	
New Zealand	46	Specific indicator	Re dollar value of negative fishery – it is not clear how this would be compared across countries. Would be useful to have this as a percentage of fisheries income to get a clearer idea of the scale of the activity.	The indicator was proposed through the SDG process. In line with the documentation for the 47 <sup>th</sup> session of the United Nations Statistical Commission the indicator has been deleted.
New Zealand	50	Specific Indicator	The case is not made that 'organic production' is synonymous with land being 'managed sustainably, ensuring conservation of biodiversity'. Any specific indicator needs to account for all management systems.	The indicator is not trying to imply that organic production is necessarily sustainable or a surrogate of sustainable management. Like most indicators it has limitations to what it can be used for. However, in the absence of other indicators and assuming it is properly interpreted it can provide useful information. No change made to the proposed list of indicators.
New Zealand	55	Specific Indicator	1) While it is good that there is now recognition of multiple certification options, the limitations of using third party certification also need to be acknowledged: the area certified will naturally hit a maximum where the cost of certification exceeds the benefit of to the forest owner.2) Care will be needed to ensure that areas that may be duel certified are not double counted.	Noted. Comment does not imply any change to the proposed list of indicators.
New Zealand	58	Generic indicator	1) It would be useful if this indicator were focused more on population level information (i.e. broader than those species under 'extinction risk') as some native species do better in production forests. 2) Any specific indicator developed under this generic indicator will need to acknowledge Article 9 (ex situ conservation)	Noted. Comment does not imply any change to the proposed list of indicators.

Reviewer	Row Number	Heading	Review Comment	Response
			of the CBD, and the national (or regional) management of forest specialist species.	
New Zealand	66	Specific indicator	Re trends in nitrogen deposition – it might be more useful to have % nitrogen deposition above "safe" limits where safe limits are referenced against the ability of the soil etc to mitigate/or process it.	The proposed indicator reflects the wording utilized by the International Nitrogen Initiative. It is not clear if the suggested indicator exists or is being developed. No change to the proposed list of indicators has been made.
New Zealand	68	Specific indicator	Re trends in global surplus in nitrogen – surplus measured where? Water? Atmosphere? This is not a very useful indicator as it stands.	The proposed indicator has been developed by the International Nitrogen Initiative and has been used in GBO-3 and GBO-4. The indicator is global but can be disaggregated to local, national and regional levels. Further information on the indicator is available from the Biodiversity Indicators Partnership website. No change to the proposed list of indicators has been made.
New Zealand	77	Specific indicator	While the generic indicator focuses on trends in IAS introduction and establishment events, the specific indicator looks only at introduction events. The result of successful invasion species management, and thus biodiversity protection, is the prevention of IAS establishment - this should be acknowledged and measured by the indicator.	It is not clear what specific indicator is being proposed and/or if it currently exists. No change to the proposed list of indicators has been made.
New Zealand	79	Specific indicator	Rather than trend in the proportion of live coral cover, suggest something along the lines of "the proportion of live coral compared to its known extent in <given year="">". Hopefully there is information to support a historical trend assessment.</given>	The indicator provides information on how coral cover has changed through time. Any period of time covered by the trend line could be used as the point of comparison. No change to the proposed indicator has been made.
New Zealand	81	Specific indicator	Could look to have something like the number of initiatives at a national level or number of countries implementing coral recovery plans as a measure.	It is not clear if the suggested indicator currently exists and/or who is collecting the necessary information. No change to the proposed list of indicators has been made.
New Zealand	97	Specific indicators	Re management effectiveness, it would be useful to include some kind of reliability index/measure to ensure that this assessment accurately reflects what is happening in this space.	It is not clear if the suggested indicator currently exists and/or who is collecting the necessary information. No change to the proposed list of indicators has been made.

Reviewer	Row Number	Heading	Review Comment	Response
New Zealand	107	Specific indicator and Source	While the specific indicator is useful, the source will fail to capture the self-supported spending within countries, or those collaborations where the funding is not supported by 'aid'. How will in-kind work be reflected – e.g., landowners and volunteers doing pest control, ecosystem rehabilitation, etc.	The proposed indicator has been removed from the list of proposed indicators.
New Zealand	110	Specific indicators	We need to broaden this out to include other domestic threat classification schemes as applicable	The proposed list of indicators focuses on the global level. The list provides a flexible framework for countries to apply as appropriate. No change to the proposed list of indicators has been made.
New Zealand	114	Specific indicators	Please clarify if this is a reference to the FAO coordinated programme.	The source of the indicators has been included to specify that the information derives from the Commission on Genetic Resources for Food and Agriculture (FAO). The indicator status has also been included as under development.
New Zealand	115	Specific indicators	Again wetland extent would be a more useful measure if it were compared against some historical point in time.	The indicator could be compared to points in time covered by its data set. It is not clear what change is being suggested. No change has been made to the proposed list of indicators.
New Zealand	116	Specific indicators	The use of extinction is likely too late to provide a useful measure of ecosystem services, as the essential services will likely be significantly degraded prior to extinction (especially if efforts to conserve the species reduce the ability of traditional users to continue to use that species)	This indicator, like most indicators, has limitations. These limitations should be acknowledged when the indicator is used. However despite having limitations the indicator can still provide useful information. It is not clear what change is being proposed. No change has been made to the proposed list of indicators.
New Zealand	122	Source	From the level of detail in the specific indicator, the source can be provided as 'FAO/ Voices of the Hungry'	FAO has been included as the source of the information.
New Zealand	125	Source	National submissions to the UNFCCC will also be a useful resource, and are developed under agreed methodologies.  GFW's methodology produces misleading	It is not clear what UNFCCC indicator is being referred to or how it relates to the target.  The source of the indicator has been expanded to include FAO.

Reviewer	Row Number	Heading	Review Comment	Response
			assessments of forest cover and therefore will provide misleading indications of carbon stock change.	
New Zealand	126	Specific indicators	Would suggest splitting into 2 different specific indicators (sequestration and avoided emissions) to better assess the different trends. Low levels of (avoided) emissions will be masked by high levels of sequestration in the remainder of the forests.  Also clarify the activities that the emissions are avoided from (e.g. some data sets provide information on the avoided fossil fuel use from biomass, which would be inappropriate in this case)	The indicator has been removed from the proposed list as it is not clear who was developing it or if it was currently available.
New Zealand	129	Specific indicator	It is critical that this goes beyond adoption of a strategy, but measures the extent to which countries are actively using them.	It is not clear what indicator is being proposed and/or how this would be measure. No change to the proposed list of indicators has been made.
New Zealand	133	Specific indicator	% of IP practicing traditional occupations possibly.	It is not clear if the proposed indicator exists and /or who is developing it or the underlying data required. No change to the proposed list of indicators has been made.
New Zealand	140	Specific indicator	The proposed indicator is not a true measure of success, as it does not assess whether these papers have led to improved implementation. It is also not clear why marine technology alone has been singled out, it should also cover terrestrial biodiversity and ecosystems.	The indicator was proposed through the SDG process. In light of the documentation prepared for the 47 <sup>th</sup> session of the United Nations Statistical Commission, the indicator has been removed from the proposed list of indicators.
New Zealand	42372	Generic indicator	With regard to trends (and this comment applies to its use in all areas of the document), a benchmark mechanism is needed now (2015) against which the direction (at best) of the trend can be compared in 2020 if this is to be a useful way of assessing the success of implementation activities.	Noted – No change has been made to the proposed list of indicators.
New	103 to	Specific	By their nature the extinction risk will change in	It is not clear what change is being suggested and

Reviewer	Row Number	Heading	Review Comment	Response
Zealand	107	indicators	response to new species information, e.g. defining sub populations will alter the risk. To be an effective indicator some standardisation will be needed (e.g. 'trends in extinction risk and populations of species as a proportion of species/populations with known data).	if the proposed indicator currently exists. No change to the proposed list of indicators has been made.
New Zealand	129-131	General comment	These indicators should be about actively doing something, rather than adopted policies or supporting investment.	It is not clear what indicator is being proposed and/or how this would be measure. No change to the proposed list of indicators has been made.
New Zealand	136-140	Generic indicator	Target 19 is wider than species, and speaks to the value of biodiversity and how widely this is shared and communicated. Incorporating information in the trend in knowledge around Targets 2, 3 and 4 would assist in assessing this	Indicators have been included in the proposed list only once in order to limit the length of the document. However it is noted in the chapeau that indicators can be relevant to more than one indicator. It is not clear if additional indicators are being proposed. No change to the proposed list of indicators has been made.
New Zealand	20-23	Generic indicator and specific indicator	As per comment above is the term "ecological footprint" a universally agreed metric?	No change made. It is not clear what change is being suggested.
New Zealand	37-38	Specific indicator	The Aichi target and the Generic indicator extend beyond forests. The specific indicators should acknowledge this.	Indicators related to natural habitat and wetlands are included in the proposed list. There is a greater emphasis on forests as this is the ecosystem for which there is currently the most information globally. It is not clear what additional indicators are being proposed. No change to the proposed list of indicators has been made.
New Zealand	42-44	Sources	We agree with the use of the generic indicator, however we see the sources for the specific indicators as potentially limiting. We would invite measures that allow for more country-specific approaches so as to account for strategies to limit biodiversity risks and more nationally appropriate definitions of sustainability.	The indicators proposed are focusing on the global level. SBSTTA recommendation XIX/4 notes that the list of indicators provides a flexible framework for Parties to adapt to their national priorities and circumstances. No change made to the proposed list of indicators.

Reviewer	Row Number	Heading	Review Comment	Response
New Zealand	51-52	Specific indicators	We question the need for two separate FAO-sourced indicators for "conservation agriculture" and "sustainable agricultural practises". Our understanding is that the FAO's principles for conservation agriculture are included under the FAO definition of "sustainable agricultural development" and thus are not additional to the specific indicator in row 52. The provision and discussion of any definition that expands on, or more specifically defines, sustainable agricultural practises is welcomed.	The first indicator has been used in GBO-3 and GBO-4. The second indicator is what is currently being proposed through the SDG indicator process. No change to the proposed list has been made.
New Zealand	59-64	Aichi target	It would be useful if the term sedimentation had been included in this target as a key "polluter". The use of the terms "that are not detrimental to ecosystem function and biodiversity" are much more useful than loosely defined safe ecological/or biological limits. This could be picked up in the specific target language.	Noted. Comment does not imply any change to the proposed indicator.
New Zealand	7 (similarly 8)	Specific indicator	The paper refers to national development plans, and assumes that these are in place in all countries. What exactly do these refer too? A clearer articulation would be to 'planning, development and environmental development legislation'	The wording has been retained as this is what is used in the source paper. In line with the SBSTTA request XIX/4 additional background information on the indicators will be developed and made available.
New Zealand	71-72	Specific indicators	Possible indicator to measure interceptions could be: "Interceptions per total border traffic and per effort of monitoring" (i.e. the number of items/consignments crossing the border versus the number inspected and found to be carrying real or potential IAS. The effort criterion should be a standardise measure, e.g. staff time)	It is not clear if the suggested indicator currently exists and/or who is collecting the necessary information. No change to the proposed list of indicators has been made.
New Zealand	84 and 85	Generic indicator	There needs to be some consideration difference between local vs. national/regional scales and indicators focus on ecosystems (c.f. single species)	It is not clear what change is being suggested. No change to the proposed list of indicators has been made.
New	86 and	Generic	These seem to be a reframing of the Aichi target,	It is not a reframing of the target. The target has

Reviewer	Row Number	Heading	Review Comment	Response
Zealand	87	indicator	and will likely confound the global or regional scale with local/sub national pressures.	two elements, the pressures on coral reefs and the pressures on other vulnerable ecosystems. These generic indicators focus on the second part of the target. It is not clear what change is being proposed. No change has been made to the proposed list of indicators.
New Zealand	89 and 94	Specific indicators	Re marine and coastal areas – it is critical to consider the scale of MPAs given their importance for effective biodiversity protection. It would be useful to add indicators about minimisation of marine area fragmentation.	It is not clear if the suggested indicator currently exists and/or who is collecting the necessary information. No change to the proposed list of indicators has been made.
New Zealand	99 and 100	Specific indicators	We fully support the use of connectedness as a means of measure.	Noted
New Zealand			We believe that local planning is much closer to the policy/implementation interface and would provide a richer assessment of policy effectiveness.	No change has been made to the proposed list. It is not clear who is preparing the indicator or collecting the data.
New Zealand			There will be an element of judgment here as harmful will likely be highly specific/ subjective, and only understandable as the wider context of biodiversity in the landscape (and other drivers) are understood.	No change made. The wording is that used by the OECD
New Zealand			We suggest the word "trend" be changed to proportion or percentage as a more quantifiable assessment	No change made. The wording is that used by the OECD
New Zealand			Rather than percent change, "percentage reduction of harmful' import and export tariffs provides the correct direction of travel.	The indicator has been removed from the proposed list in line with the documentation for the 47 <sup>th</sup> session of the United Nations Statistical Comission.
OECD	10	Trends in potentially harmful elements of government support to agriculture	Trends in potentially harmful elements of government support to agriculture (producer and consumer support estimate) Please also change to: Available today (X); and in our view the data is easy to communicate (see figures below). The global indicator can be disaggregated and the national data can be aggregated.	Change made

Reviewer	Row Number	Heading	Review Comment	Response
		(producer and consumer support estimate)	(If you have X under the Biodiversity Barometer, for example, which only has data on 9 countries, then it seems appropriate to put X here too. Data is available for 21 countries plus the EU27). See e.g.:	
OECD	12	Number of countries with national instruments on biodiversity-relevant taxes, charges, fees	Under active development (Y) Easy to communicate (X) Data is available at national or sub-national level Source: OECD http://www2.oecd.org/ecoinst/queries/Default.as px	Change made
OECD	15	Number of countries with national instruments on biodiversity-relevant tradable permit schemes	Under active development (Y) Easy to communicate (X) Source: OECD http://www2.oecd.org/ecoinst/queries/Default.as px	Change made
OECD	98	Trends in protected area funding	We suggest that in cases when BIP needs to focus in on bilateral biodiversity-related ODA from DAC donors, the OECD DAC statistics database is the most accurate and comprehensive source. Besides the Biodiversity Rio maker, it allows to look at the data also at a sub-sector level. OECD biodiversity data visualisation tool can be accessed here. At the moment, OECD DAC has data available on biodiversity-related aid from bilateral sources. The multilateral development banks (MDBs) are currently in the process of standardising their definitions and methodologies for collecting biodiversity-related aid data. The OECD is closely cooperating with MDBs in this process, in order to get this data	The indicator has been removed from the proposed list of indicators.

Reviewer	Row Number	Heading	Review Comment	Response
			into the OECD DAC statistics. The key benefit of the OECD DAC statistics is the consistency that will prevent double counting between bilateral and multilateral aid. AidData draws extensively on OECD DAC statistics, and therefore, essentially a lot of the data is the same. In addition, AidData claims to have some data also on biodiversity-related multilateral aid. However, drawn from a variety of sources, it is unclear how standardised this data is, and what definitions and methodologies are used.	
OECD	107	Funds towards species protection	Same comments as above for row 98	The indicator has been removed from the proposed list.
OECD	119	Wellbeing indicator for the environment	Currently indicates Under active development, though not clear why. Is the data below (see links) the ones you mean? Please change to Available today (X). http://www.oecdbetterlifeindex.org/; http://www.oecdbetterlifeindex.org/topics/environment/	Change made
OECD	141	Trends in mobilisation of financial resources	While members are requested to report to the Convention using the financial reporting framework, we suggest that the OECD DAC statistics remains a complementary source of information on the ODA data. Many members tend to use the DAC statistics as a starting point before they report to the Convention. The reporting to the Convention often entails applying adjustment to the data reported to DAC statistics, e.g. the use coefficients.	Some of the indicators within the reporting framework could make use of OECD DAC data.
OECD	Insert a new row under row 10	Trends in potentially harmful elements of government	Under active development (Y) Source: OECD	Change made

Reviewer	Row Number	Heading	Review Comment	Response
		support to fisheries		
Pennsylvan ia State University	97	Available today (X) or under active development (Y)	X	The indicator has been included in the list under "trends in extinction risk and populations of species". In order to keep the proposed list to a manageable size, indicators have only been included once.
Pennsylvan ia State University	97	Easy to communicate	X	The indicator has been included in the list under "trends in extinction risk and populations of species". In order to keep the proposed list to a manageable size, indicators have only been included once.
Pennsylvan ia State University	97	Generic Indicator	Add one more indicator under Trends in effectiveness and/or equitability of management of protected areas.	The indicator has been included in the list under "trends in extinction risk and populations of species". In order to keep the proposed list to a manageable size, indicators have only been included once.
Pennsylvan ia State University	97	Global indicator can be disaggregated to create national indicator	It can be, but it is limited by the number of sites in each country. As the TEAM network expands and Wildlife Insights (federated camera trap project – TEAM, CI, Smithsonian, WCS, North Carolina Museum of Natural Sciences) is implemented the number of data sets will grow.	The indicator has been included in the list under "trends in extinction risk and populations of species". In order to keep the proposed list to a manageable size, indicators have only been included once.
Pennsylvan ia State University	97	National data are aggregated to form global indicator	Can be, but the minimum spatial unit is of aggregation is local data (at the level of a protected area or site).	The indicator has been included in the list under "trends in extinction risk and populations of species". In order to keep the proposed list to a manageable size, indicators have only been included once.
Pennsylvan ia State University	97	Source	Tropical Ecology Assessment and Monitoring (TEAM) Network	The indicator has been included in the list under "trends in extinction risk and populations of species". In order to keep the proposed list to a manageable size, indicators have only been included once.
Pennsylvan ia State	97	Specific Indicator	The Wildlife Picture Index (disaggregated by protected area): When calculated at the scale of a	The indicator has been included in the list under "trends in extinction risk and populations of

Reviewer	Row Number	Heading	Review Comment	Response
University			protected area, the WPI can measure the effectiveness of protected areas as actual conservation outcomes because its measures trends in biodiversity through time. Many, many ground-dwelling mammals, in particular, are extremely difficult to monitor, and this approach provides a means of measuring the effectiveness of individual protected areas.	species". In order to keep the proposed list to a manageable size, indicators have only been included once.
Pennsylvan ia State University	97	Used in GBO3/GBO4	No	The indicator has been included in the list under "trends in extinction risk and populations of species". In order to keep the proposed list to a manageable size, indicators have only been included once.
Pennsylvan ia State University	107	Available today (X) or under active development (Y)	X	Change made
Pennsylvan ia State University	107	Easy to communicate	X	Change made
Pennsylvan ia State University	107	Generic Indicator	Add one more indicator under Trends in extinction risk and populations of species	Given that the indicator is available and has been published and is reflected in the Biodiversity Indicators Partnership, the indicator has been added to the proposed list.
Pennsylvan ia State University	107	Global indicator can be disaggregated to create national indicator	It can be, but currently limited by the number of sites in each country. As the TEAM network expands and Wildlife Insights (federated camera trap project – TEAM, CI, Smithsonian, WCS, North Carolina Museum of Natural Sciences) is implemented the number of data sets will grow.	As the data set is currently limited, the indicator has not been noted as being disaggregated to national level. No change made
Pennsylvan ia State University	107	National data are aggregated to form global indicator	Can be, but the minimum spatial unit of aggregation is local data (at the level of a protected area or site).	As the data set is currently limited, the indicator has not been noted as being disaggregated to national level. No change made

Reviewer	Row Number	Heading	Review Comment	Response
Pennsylvan ia State University	107	Source	Tropical Ecology Assessment and Monitoring (TEAM) Network	Change made
Pennsylvan ia State University	107	Specific Indicator	The Wildlife Picture Index: This is the only index included within the BIP that uses in situ primary data to monitor populations of ground-dwelling mammals and birds in tropical forests (see Beaudrot et al., 2015, O'Brien et al. 2008). It fills an important geographic gap for tropical forests globally and covers a critical group of species (about 300 between mammals and birds). It is also updated in near-real time (within months of data collection). This is a remarkable approach to low-cost data collection on ground-dwelling mammals (especially), and should be included as a key indicator.	Given that the indicator is available and has been published and is reflected in the Biodiversity Indicators Partnership, the indicator has been added to the proposed list.
Pennsylvan ia State University	107	Used in GBO3/GBO4	Included in Appendixes of GBO4.	Change made
The Australian Museum (and GEO BON Implementa tion Committee)	35	Target 5, Specific Indicator	The proposed Biodiversity Habitat Index integrates biotic and environmental data and may provide useful indicator information about trends in habitat loss by measuring that loss in a way that reflects impacts on biodiversity. This is described as in-development. Part of that development process should include comparison with the existing, similar, indicator approaches – the "environmental diversity" (ED) indices of representativeness* (see also Row 96 comments).  *Beier P, Albuquerque F. (2015) Environmental diversity is a reliable surrogate for species representation. Conservation Biology 29:692–701.  *Faith, DP (2016) Using Phylogenetic Dissimilarities Among Sites for Biodiversity	It is not clear what change is being suggested. No change has been made to the proposed list of indicators.

Reviewer	Row Number	Heading	Review Comment	Response
			Assessments and Conservation. In: Pellens R, Grandcolas P (eds) Biodiversity Conservation and Phylogenetic Systematics: preserving our evolutionary heritage in an extinction crisis. Springer, Dordrecht	
The Australian Museum (and GEO BON Implementa tion Committee)	39	Target Specific Indicator	The Species Habitat Index, under development, is proposed for target 5 under "Trends in extinction risk and populations of habitat specialist species in each major habitat type". The proposed index ( <i>Global Biodiversity Change Indicators</i> , Version 1.2, 2015) is an aggregation of fractional losses in suitable-habitat or range, for available species from Map of Life (MoL). The information base for this indicator is extremely valuable, but one weakness may be that the ad hoc set of available species (in MoL) does not provide the <i>representative</i> set of species desired for an indicator. Thus, the indicator as described may not represent the status of the full set of species in the given habitat type. The GEO BON <i>fractional genetic diversity index</i> (see row 111) uses a method for subsampling or transforming the available (MoL or other) species into a representative set; this representative set also may serve in this context, providing an alternative <i>Representative Species Habitat Index</i> (see also row 95).	It is not clear what change is being suggested. No change has been made to the proposed list of indicators.
The Australian Museum (and GEO BON Implementa tion Committee)	88	Target 1 Specific Indicator	Target 11 is the "17% coverage target", but, as highlighted at the recent World Parks Congress, simplistic use of a percent cover target remains problematic – a problem recognised long ago in the history of proposing percent targets. This problem extends to coverage of types or biomes (row 94). In essence, a country with unrepresentative PAs may have 17% area coverage, without achieving representation in the	It is not clear what change is being suggested. No change has been made to the proposed list of indicators.

Reviewer	Row Number	Heading	Review Comment	Response
			PAs of much of its biodiversity. An effective enhanced indicator, under development, converts the 17% level to some minimum required degree of biodiversity representativeness. A country with unrepresentative PAs providing 17% coverage then has to have more than 17% areacoverage to satisfy its "17% target obligation" – equal to the baseline expectation of how much representativeness could have been delivered by an effective representative 17%. In a Papua New Guinea case study, 16.8% area was required in order to now achieve the representativeness that could have been achieved by an unconstrained 10% area (Faith et al 2001, see http://australianmuseum.net.au/document/a-biodiversity-conservation-plan-for-papua-new-guinea-based-on-biodiversity-trade-offs-analysis ). See also Rows 95, 96 regarding representativeness issues.	
The Australian Museum (and GEO BON Implementa tion Committee)	91	Target 11 Specific Indicator	Key Biodiversity Areas (KBAs) are important for biodiversity conservation and it makes sense to have an indicator for target 11 based on KBAs. The proposed indicator refers to "Protected area coverage of Key Biodiversity Areas."* This may be enhanced by another informative KBA indicator. IUCN notes that KBAs naturally sometimes duplicate one another** – pointing to occurrence of the same endangered species (or other elements). IUCN acknowledges that conservation planning and priority setting for protected areas may involve some priority setting among KBAs, e.g. to maximise representation of all the defining elements within some target number of protected areas. High PA coverage of a set of KBAs that mostly represent the same elements is not as	It is not clear what change is being suggested. No change has been made to the proposed list of indicators.

Reviewer	Row Number	Heading	Review Comment	Response
			effective as high PA coverage of a set of KBAs that represents many different elements. I suggest an enhanced, complementary indicator, "Protected area representativeness of the biodiversity elements defining Key Biodiversity Areas", labelled Y = under development. *For related discussion, see Brooks et al (2015) Biodiversity, 16:2-3, 157-174. **Alliance for Zero Extinction KBAs typically contain the only known record of an endangered species and so always are high priority.	
The Australian Museum (and GEO BON Implementa tion Committee)	94	Target 11	See row 88 above	It is not clear what change is being suggested. No change has been made to the proposed list of indicators.
The Australian Museum (and GEO BON Implementa tion Committee)	95	Target 11 Specific Indicator	The "species protection index", under development, is potentially very useful in using extensive available data (and models) on species distribution, to estimate overlap with protected areas. This indicator has not yet been peerreviewed. Similar to the row 39 case, one weakness may be that the ad hoc set of available species (in Map of Life (MoL)) does not provide a representative set of species – thus, the indicator as described may not indicate overall degree of representativeness of the PAs. An alternative "representative species protection index" overcomes this problem by converting the available species into a representative set (see row 39); this also would link more closely to the desired generic indicator, "ecological representativeness".	It is not clear what change is being suggested. No change has been made to the proposed list of indicators.

Reviewer	Row Number	Heading	Review Comment	Response
The Australian Museum (and GEO BON Implementa tion Committee)	96	Target 11 Specific Indicator	The "protected area representativeness index", under development, is potentially very useful—linking extensive available data on species distribution to available environmental data to build robust models. This indicator appears not to have been peer-reviewed. One weakness may be that is not interpretable as indicating a "count" of the overall fraction of species (or other elements) represented in protected areas. The index is described by GEO BON ( <i>Global Biodiversity Change Indicators</i> , Version 1.2, 2015) as indicating the "proportion of biologically-scaled environmental diversity included in protected areas". Existing, peer-reviewed, "environmental diversity" (ED) indices of representativeness (see row 35), that already can calculate proportion of biologically-scaled environmental diversity included in protected areas, should be considered as alternatives using the same available data. This also may complement the existing indicator, Row 92, "Protected Area Overlaps with Biodiversity". This indicator is linked to areas of particular importance, but also was designed to reflect ecological representativeness; this could be reconciled with the indices discussed in this box.	It is not clear what change is being suggested. No change has been made to the proposed list of indicators.
The Australian Museum (and GEO BON Implementa tion Committee)	105	Target 12 Specific Indicator	This looks good. In contrast to row 95, here the "species protection index" is to be applied to a defined subset of species - species in decline - and so the representativeness problem is reduced.	It is not clear what change is being suggested. No change has been made to the proposed list of indicators.
The Australian	106	Target 12 Specific	The Local Biodiversity Intactness Index (LBII) is valuable, but does not seem to serve this	It is not clear what change is being suggested. No change has been made to the proposed list of

Reviewer	Row Number	Heading	Review Comment	Response
Museum (and GEO BON Implementa tion Committee)		Indicator	particular target. Target 12 is about preventing the extinction of known threatened species; LBII does not appear to provide information about extinction of known threatened species. The Red List Index is likely to be the most effective indicator for this target, and for other targets calling for assessment of trends for specific species subsets (6, 8, 10, 13, 14).	indicators.
The Australian Museum (and GEO BON Implementa tion Committee)	108	Target Specific Indicator	The ex-situ crop collections enrichment index, in development, is potentially an extremely valuable indicator of maintenance of the crop genetic diversity for resilience and adaptability. The BIP (http://www.bipindicators.net/cropcollections) report says: "The enrichment index weights the pool of accessions entering the collection each year according to their originality when compared to the accessions already present in the collection The accessions weight for each year is estimated individually for each accession and summed for all accessions entering the collection."  The summing of individual scores, however, does not effectively indicate the desired quantity: the total enrichment provided by the set of all accessions for the year. A report "Monitoring Crop Genetic Diversity" (Dulloo, 2015; http://www.arcad-project.org/content/download/4573/36683/versio n/1/file/2_7+Monitoring+crop+genetic+diversity +-+DULLOH.pdf) shows how an accession for a given species has a enrichment index score that relates via a power-curve to the number of previous accessions for that species (so that the first-ever accession of a species scores very high and later duplicates score very low). This power-	It is not clear what change is being suggested. No change has been made to the proposed list of indicators.

Reviewer	Row Number	Heading	Review Comment	Response
			curve link in fact provides an opportunity for an effective indicator – it has good theoretical support as an indicator of the amount of within-species genetic diversity represented. However, to strengthen this link to representation of genetic diversity, refinement of the overall enrichment index indicator should consider alternatives to the summation of individual accessions' enrichment index scores.	
The Australian Museum (and GEO BON Implementa tion Committee)	111	Target 13 Specific Indicator	The Species Habitat Index (aggregation of habitat or range loss fractions, for available species from MoL), under development, also is proposed for target 13 under "Trends in extinction risk and populations of wild relatives". Target 13 is intended to preserve the genetic diversity within species, including within wild relatives species. GEO BON, in development, has a fractional genetic diversity index, which is a function of estimated fractional range loss (or fractional loss of the species habitat/environmental space). The resulting sum/average of fractional genetic diversity losses would not be indicated adequately by the sum/average of fractional range losses (Species Habitat Index). Therefore the fractional genetic diversity index forms an informative complementary index for target 13. Note also that the fractional genetic diversity index derives a representative set of species to better provide a general indicator (see also rows 39 and 95).	It is not clear what change is being suggested. No change has been made to the proposed list of indicators.
The Australian Museum (and GEO BON Implementa	112	Target 13 Specific Indicator	This looks good. In contrast to row 95, here the "species protection index" is for a defined subset of species, and so the representativeness problem does not arise.	It is not clear what change is being suggested. No change has been made to the proposed list of indicators.

Reviewer	Row Number	Heading	Review Comment	Response
tion Committee)				
The Morton Arboretum	108	2 & 3	Suggest to consider objectives I and II of the Global Strategy for Plant Conservation, which lists quantitative <i>metrics for preserving plant diversity</i> - meeting these objectives should ensure safeguarding genetic variation. These would be good indicators.	It is not clear if the suggested indicators are currently operational or if they are being developed. No change to the proposed list of indicators has been made.
The Morton Arboretum	109	3	Suggest to use quantitative metrics of genetic differentiation and phylogenetic breadth or phylogenetic distinctiveness <i>instead of</i> breeds. The number of breeds does not necessarily equate to number of genetic variants, whereas a real genetic measure based on DNA sequences or phylogenetic tree will represent preserving genetic variation	It is not clear if the suggested indicator currently exists or is being developed. No change to the proposed list of indicators has been developed.
The Morton Arboretum	110	2	Suggest to change to 'population size' or better 'effective population size' because a large area protected does not mean the genetic variation is being maintained	It is not clear what change is being suggested. No change to the proposed list of indicators has been made.
The Morton Arboretum	113	3	This is a most crucial indicator and urgently needs development. Genetic scientists need to determine which species and how often to measure genetic variation	Noted
The Morton Arboretum	114		See comment for line 108	It is not clear if the suggested indicators are currently operational or if they are being developed. No change to the proposed list of indicators has been made.
The Natural History Museum	34	Specific Indicator	Although it is correct that trends are not yet available, it is now possible to calculate forest fragmentation annually, using the approach of Haddad et al. 2015 Science Advances 1:e1500052 (http://advances.sciencemag.org/content/1/2/e15 00052). They calculated the percentage of forest that is within 100m of an edge.	It is not clear what the suggested change is. The study referred does not contain an indicator as such but does indicate that data could become available in the future. Given that the suggestion is for the list of proposed indicators to be kept under review no change has been made to the proposed list of indicators.

Reviewer	Row Number	Heading	Review Comment	Response
The Natural History Museum	35	Global indicator can be disaggregated	BHI is a global indicator that can be disaggregated; see the description on pages 6-7 of <a href="http://www.geobon.org/Downloads/brochures/20">http://www.geobon.org/Downloads/brochures/20</a> <a href="http://www.geobon.org/Downloads/brochures/20">15/GBCI_Version1.2_low.pdf</a>	As the indicator is still under development. The different criteria have been left blank. This is the approach taken with all indicators under development.
The Natural History Museum	64	All	The Red List Index is problematic as a whole, because of the difficulty of making repeatable decisions as to whether a change in species' status reflects a genuine change or just an improvement in knowledge. There is an additional problem when partitioning the RLI to assess effects of particular drivers, as is proposed here. First, because taxonomic groups vary in their sensitivity to threats such as pollution, and RLI can be calculated only for a very few groups, the RLI might miss very serious and widespread effects. Specifically, pollution is a particular problem in freshwater, but fish and freshwater invertebrates are excluded. Second, the reasons for changes in status are often not clear – e.g. Stuart et al.'s 2004 (Science 306:1783 - http://www.sciencemag.org/content/306/5702/1783) assessment that the causes of decline could not be identified for 48% of rapidly-declining amphibians – meaning that effects of drivers cannot be inferred robustly. Third, changes in status are likely to often reflect a combination of pressures, again making robust estimate of the effects of any one driver extremely difficult.	The Red List, like the majority of indicators, has limitations. These need to be recognized when there are used. This was the approached used in GBO-3 and GBO-4. No change has been made to the proposed list of indicators.
The Natural History Museum	75	All	See comment for line 64: it is not clear that the Red List Index can meaningfully be partitioned up by threat type in this way.	The Red List, like the majority of indicators, has limitations. These need to be recognized when there are used. This was the approached used in GBO-3 and GBO-4. No change has been made to the proposed list of indicators.
The Natural History	106	All	LBII is also relevant for Target 14, because of the growing evidence that local broad-sense	In order to keep the list of indicators to a manageable size, indicators have only been

Reviewer	Row Number	Heading	Review Comment	Response
Museum			biodiversity contributes positively to ecosystem multifunctionality. As LBII is a broadly-based indicator for local terrestrial biodiversity, it is relevant for "Trends in extinction risk and populations of species that provide essential services" – the listed indicators for that generic indicator are all vertebrate-biased.	included once in the proposed list. The introductory text to the list of indicators notes that indicators may be relevant to more than one target. No change has been made to the proposed list of indicators.
The Natural History Museum	106	Global indicator can be disaggregated	LBII is a global indicator that can be disaggregated; see the description on pages 12-13 of http://www.geobon.org/Downloads/brochures/2015/GBCI_Version1.2_low.pdf.	As the indicator is still under development, the criteria have been left blank for the time being. This is the approach taken with all indicators under development
The Natural History Museum	106	Used in GBO3/GBO4	Two of the family of measures that make up LBII (total abundance and local species richness, relative to unimpacted baseline) were included in GBO4; see p285 of https://www.cbd.int/doc/publications/cbd-ts-78-en.pdf.	As the indicator is still under development, the criteria have been left blank for the time being. This is the approach taken with all indicators under development
The Natural History Museum	116	All	The Red List Index for pollinating species is restricted to vertebrates, which are not major pollinators compared with many insect taxa. Given how unrepresentative it is, it is not clear that this index is fit for this purpose.	The Red List, like the majority of indicators, has limitations. These need to be recognized when it is used. This was the approached used in GBO-3 and GBO-4. No change has been made to the proposed list of indicators.
The Natural History Museum	All	All	Scientific rigour and transparency are much more relevant criteria for assessing the value of proposed indicators than whether they were used in GBO3 or GBO4.	The criteria include are those requested by SBSTTA in recommendation XIX/4.
The Natural History Museum	All	Used in GBO3/GBO4	This is not a relevant evaluation criterion. Earlier assessments have – or should have – made use of the best available indicators at that time. This assessment should make use of the best available indicators now. Knowing whether something was the best available indicator at some point in the past is therefore not pertinent: ongoing fitness for purpose should not be assumed.	The criteria have not been used to include or exclude specific indicators but rather to give Parties an idea of their characteristics. "used on GBO" only indicates if they have been previously used.
UNCCD	36	Aichi	The UNCCD indicator to track land degradation	The indicator has been included under target 5 as

Reviewer	Row Number	Heading	Review Comment	Response
		Biodiversity Target	shall be listed under Aichi target 15 (more precisely under the general indicator "Trends in proportion of degraded ecosystems restored" which was included in the AHTEG report, but disappeared from the list currently under review (see also comment below related to raw number 127)).  While being a multipurpose indicator that could help measuring progress towards several Aichi targets, the UNCCD indicator is most relevant to track land degradation/restoration and therefore progress towards Aichi target 15. Indeed, the AHTEG had originally listed this indicator under target 15.	it appears to relate more directly to trends in land degradation than to efforts at restoring ecosystems. No change has been made to the proposed list of indicators
UNCCD	36	Easy to communicate	The UNCCD indicator shall be rated as easy to communicate (X) At its meeting, the AHTEG rated this indicator as easy to communicate. While this was reflected in the draft report of the meeting (version 30/9/2015), the final report did not include the assessment of indicators under active development against the set of criteria identified by the AHTEG. However, the indicator was assessed during the meeting and the group reached an agreement on its suitability	As the indicator is under active development the criteria have not yet been assessed. No change to the proposed list of indicators has been made.
UNCCD	36	Global Indicator can be disaggregated to create national indicators	The UNCCD indicator shall be rated as global indicator that can be disaggregated to create national indicators (X) At its meeting, the AHTEG assessed that this global indicator is suitable for disaggregation. For the above mentioned reasons, this assessment was not reflected in the final version of the AHTEG report. Data underpinning the indicator are mainly derived from open access remote sensing data sources. Therefore they have global coverage and	As the indicator is under active development the criteria have not yet been assessed. No change to the proposed list of indicators has been made.

Reviewer	Row Number	Heading	Review Comment	Response
			can be disaggregated to the national level. The approach has already been tested in 14 countries in the framework of the Land Degradation Neutrality project. The pilot project demonstrated that national estimates of the indicators can be derived from global data sources at a scale appropriate for most countries, with some limitations for small island states, mountain countries and highly fragmented landscapes.	
UNCCD	36	Specific Indicator	No changes required at this stage. However, please note that the name of the indicator is currently under discussion at the level of the Inter-agency and Expert Group on the Sustainable Development Goal Indicators. It will therefore have to be adjusted based on the outcomes of the 47th Session of the United Nations Statistical Commission.	The wording of the SDG indicators has been updated to reflect the documentation prepared for the 47th session of the United Nations Statistical Commission
UNCCD	127	Generic Indicator	The generic indicator "Trends in proportion of degraded ecosystems restored" shall be reintroduced into the list.  The generic indicator "Trends in proportion of degraded ecosystems restored" identified by the AHTEG is missing in this list. It should be reintroduced as it is essential to track progress towards the target element "at least 15 per cent of degraded ecosystems are restored". Specific indicators under this generic indicator are the UNCCD indicator (see above) and the GEOBON indicator Global ecosystem restoration index.	The indicator has been included under target 5 as it appears to relate more directly to trends in land degradation than to restoration efforts at restoring ecosystems. No change has been made to the proposed list of indicators.
United Kingdom	0	0	In general, we would suggest that the assessment 'available today' is further qualified. In many cases a 'global' indicator is 'available today' on very partial data and further work is required to improve coverage and representativeness and to understand sources of uncertainty and to remove	The criteria used in the assessment were those requested by SBSTTA. The additional criteria referred to could be included in the additional factsheets requested by SBSTTA. No change made to the proposed list of indicators.

Reviewer	Row Number	Heading	Review Comment	Response
			bias. This could be done by adding a further column with a quality assessment.	
United Kingdom	0	0	Most of the proposed SDG indicators in this table have not been reviewed by the AHTEG or scored. The methods are under development and they may change. It would be preferable to present the SDG indicators in a separate table. Where similar indicators have been listed by the AHTEG they should be cross-referenced to the relevant SDG indicator.	The SDG indicators have had the different criteria removed. The exception to this is those indicators which have previously been used in preparing GBO-3 or GBO-4 or have been used in other Convention processes. An additional column has been added to the table to indicate where an indicator is a proposed SDG indicator. Given that the SDG indicator discussions are ongoing the SDG indicators will need to be reviewed.
United Kingdom	0	0	A number of other indicators are not assessed as available or under active development. Unless indicators are available or likely to be available and data sources are identified they should be removed from this list. Another list could be produced of proposed/potential indicators. These indicators are identified below.	All indicators which are either not currently available or under active development have been removed from the proposed list. The exceptions to this are indicators proposed through the SDG process. However, as noted, the SDG indicators discussions are ongoing so these still need to be updated to reflect the outcomes of that process.
United Kingdom	0	0	Careful consideration should be given to the indicators identified as good for communication. It would be preferable to limit these to 1 or 2 per target. This applies in particular to targets 11 and 12 where there are several indicators identified.	The indicators identified as good for communication are the result of the work of the AHTEG and peer review comments. It is not clear from the comment which indicators should be rated as good for communication. No change to the proposed list of indicators has been made.
United Kingdom	1	Availability	Data only available for small number of countries. Not clear how representative those countries are.	The information is only available for a limited number of countries however some of these are very large countries in terms of population. Further all regions, except Africa, are represented. However it is clear that representivity is an issue. Given that the indicator has been previously used in GBO-3 and GBO-4 and that it is included in the Biodiversity Indicators Partnership the indicator has been retained. However when it is used its limitations should be acknowledged.

Reviewer	Row Number	Heading	Review Comment	Response
United Kingdom	2		Not very clear how this indicator relates to the target and whether there are different trends in the use of terminology, access to google, use of internet searches, and linguistic difference, which vary independently of awareness.	Interest in an issue is an indication of awareness. Google trends information has been used in a variety of scientific publications. However there are limitations. These should be acknowledged. Google trends was used in the GBO-4 Technical Study. No change to the proposed list of indicators has been made.
United Kingdom	3		Relevance of this indicator is strongly influenced by the 'selection of topics in environmental science'. This would need to be reviewed when further details of the methodology of the SDG indicator are known.	In line with the documentation prepared for the 47 <sup>th</sup> session of the United Nations Statistical Commission, this indicator has been removed from the proposed list of indicators.
United Kingdom	4		No scoring for this indicator? Not sure about availability, but would score 'X' for easy to communicate, disaggregation and aggregation. Add scoring or remove.	The indicator has been removed from the proposed list of indicators as it was not clear if the indicator was available.
United Kingdom	6		Availability and data source?	Available and the data source have been added.
United Kingdom	7		The proposed SDG indicator seems to be very similar to the indicator presented in line 8. This should be referenced as a single indicator which applies to generic indicator in line 8.	The wording of the indicator has been updated to reflect the most recent SDG indicator proposal
United Kingdom	9		No scoring for this indicator. If not available or being developed should be removed from list.	Indicator source has been added and the wording of the indicator has been updated to accurately reflect the language used by the OECD
United Kingdom	10		Not clear, based on report from the OECD WPBWE meeting in October 2015, whether OECD have a mechanism for collecting these data.	As per comments from the OECD, the indicator has been retained.
United Kingdom	11		Not clear whether this SDG indicator is relevant to the target.	The indicator has been updated to reflect the most recent SDG proposal. The indicator appears to duplicate the proposed OECD indicators for Target 3. However as discussions related to the SDG indicator process are ongoing the indicator has been retained for the time being.
United	12		No scoring for this indicator? Data source not	As per comments from the OECD, the indicator

Reviewer	Row Number	Heading	Review Comment	Response
Kingdom			clear – OECD?	has been classified as under development and the source has been included.
United Kingdom	13		No scoring for this indicator? Data source not clear – OECD? If broad definition of PES is used, including A-E schemes, then many countries will count.	As per comments from the OECD, the indicators wording has been updated and the source has been included as OECD.
United Kingdom	14		REDD+ can be considered PES, so this would a subset of 13?	It could perhaps be a subset. However the source of the underlying information is different. The first indicator is based on OECD data while the second is based on data from UNEP-REDD. No change has been made to the proposed list for this reason.
United Kingdom	15		No scoring for this indicator? Data source not clear – OECD?	The indicator wording has been modified to that proposed by the OECD and the source has been included as OECD.
United Kingdom	16		No scoring for this indicator? Data source not clear – OECD?	The indicator wording has been modified to that proposed by the OECD and the source has been included as OECD.
United Kingdom	20		We have reservations about the methods used in this indicator and have concerns about the assessment of 'easy to communicate'. The concept is easy to communicate but over simplified in terms of impacts and the methods and data used may be misleading.	The ecological footprint has been used in GBO-3 and GBO-4 and has been published. Like most indicators it has limitations which should be acknowledged when the indicator is used but nonetheless the indicator can provide useful information. No change to the proposed list of indicators has been made.
United Kingdom	21		Not clear whether this SDG indicator is relevant to the target (all materials are treated as equal on the basis of weight) and does not relate to sustainable production or ecological limits.	In line with the documentation prepared for the 47 <sup>th</sup> session of the United Nations Statistical Commission, the proposed indicator has been replaced.
United Kingdom	23		See comments on 21.	The indicator is a proposed SDG indicator so has been retained pending the conclusion of the SDG indicator discussions
United Kingdom	25		Requires further improvement in data coverage.	Many of the indicators require further improvements to data coverage. The proposed change is not clear. No change to the proposed list of indicators has been made.

Reviewer	Row Number	Heading	Review Comment	Response
United Kingdom	27		Quite a narrow and prescriptive indicator. City authorities may have many different ways of assessing trends in biodiversity not just CBI.	SBSTTA recommendation XIX/4 notes that the indicators should be adapted to national priorities and circumstances and be used in a flexible manner. In the absence of other indicators, and given that the CBI was noted in Decision X/22, the indicator has been retained. No change to the proposed list of indicators has been made,
United Kingdom	29		No scoring for this indicator? Data source not clear.	The indicator has been removed from the proposed list.
United Kingdom	33		No scoring for this indicator? Data source not clear. Would be difficult to determine. Some agricultural practices are important for maintaining semi-natural habitats.	Scoring and the source of the indicator have been included. The indicator is developed by PBL and is used in their modelling work. No change to the proposed list of indicators made.
United Kingdom	35		GEOBON claim the indicator can be disaggregated. Has this work been published yet?	As the indicator is under active development the criteria have not yet been assessed. No change to the proposed list of indicators made.
United Kingdom	36		Presume these data are aggregated from the national level.	As the indicator is under active development the criteria have not yet been assessed. No change to the proposed list of indicators made.
United Kingdom	38		Limitations of taxonomic coverage, representativeness and bias.	Most of the proposed indicators have limitations which should be acknowledged when they are used. It is not clear what change is being suggested. No change made to the proposed list of indicators.
United Kingdom	39		GEOBON claim the indicator can be disaggregated. Has this work been published yet?	As the indicator is under active development the criteria have not yet been assessed. No change to the proposed list of indicators made.
United Kingdom	53		This appears to refer to two different specific indicators? Do either of these have comprehensive global coverage?	The wording of the indicator has been provided by the indicator developer. The indicator is in the BIP suite of indicators and has been used in GBO-3. No change has been made to the proposed list of indicators
United Kingdom	57		This SDG indicator appears most relevant to target 5?	The indicator has been deleted in light of the documentation prepared for the 47 <sup>th</sup> session of the United Nations Commission on Sustainable Development.

Reviewer	Row Number	Heading	Review Comment	Response
United Kingdom	63		Not clear that this SDG indicator is relevant to Target 8.	The indicator relates to household and ambient air quality which is an indication of pollution. Like most of the proposed indicators, there are limitations to the indicator and the indicator will need to be revisited in light of the ongoing SDG discussions. No change to the proposed list of indicators has been made.
United Kingdom	64		Is there evidence that demonstrates that the trends in selected 'threat' groups of species can be attributed to those specific threats? Have auto-correlated factors been taken into account?	The indicator has been previously used in GBO-3 and GBO-4. It is not clear what change is being suggested. No change has been made to the proposed list of indicators.
United Kingdom	83		Indicators for forest and wetland loss are included under Target 5? Should be cross-referenced.	The chapeau to the indicator table notes that indicators may be relevant to more than one target but have been only included in the table once in order to keep the overall length of the document to a manageable size. No change to the proposed list of indicators has been made.
United Kingdom	94		Seems to be substantial overlap with indicators at lines 88 and 89?	The indicator is related but different as it focuses specifically on ecoregions. No change to the proposed list has been made.
United Kingdom	98		Not sure how useful this indicator is. How reliable are the data? Do the data include all sources of funding. Spending is not part of the target. Issues relating to resource mobilization are addressed in Target 20.	The indicator has been removed from the proposed list.
United Kingdom	102		Is it possible to make any meaningful global scale assessment?	The indicator is a global indicator and it has been used in GBO-3. The indicator has also been published in Scientific journals. It is not clear what change is being proposed. No change to the proposed list of indicators has been made.
United Kingdom	106		Is this a globally representative indicator. What does it mean? How does it relate to target 12.	The indicator is under development. The LBII estimates how much of a terrestrial site's original biodiversity remains in the face of human land use and related pressures. The LBII can report on both species-richness and mean abundance, and is being developed

Reviewer	Row Number	Heading	Review Comment	Response
				further to also report on geographic range rarity (endemism) and phylogenetic diversity. It is not clear what change is being proposed. No change to the proposed list of indicators has been made.
United Kingdom	107		Not sure how useful this indicator is. How reliable are the data? Do the data include all sources of funding. Spending is not part of the target. Issues relating to resource mobilization are addressed in Target 20.	The indicator has been removed from the proposed list of indicators.
United Kingdom	112		What remains to be resolved in this indicator? PAs are a very narrow generic indicator relating to conservation strategies. PA coverage does not imply conservation of these species.	The indicator is under development. The Species Protection Index (SPI) measures how much suitable habitat for single species is under protection and estimates the regional or global biodiversity representativeness of terrestrial protected areas. It is not clear what change is being suggested. No change to the proposed list of indicators has been made.
United Kingdom	114		No scoring for these indicators? Data sources not clear.	The indicator is under development. The source of the indicator has been included.
United Kingdom	115		This seems to duplicate change in wetland at line 32 and related SDG indicator. Should this refer to extent of wetland in protected areas?	The list of indicators has been updated to reflect the documentation for the 47th sessions of the United Nations Statistical Commission It is not clear that there is duplication because of the new wording. No change has been made to the proposed list of indicators.
United Kingdom	117		Not sure this would qualify as easy to communicate as there must be significant caveats regarding its interpretation.	The easy to communicate classification was the result from the AHTEG and has been retained.
United Kingdom	122		No scoring for these indicators? Data sources not clear.	Availability and source of information have been included.
United Kingdom	126		No scoring for these indicators? Data sources not clear.	The indicator has been removed from the list of proposed indicators.
United Kingdom	140		Issues relating to resource mobilization are addressed in Target 20.	The indicator has been removed from the list of proposed indicators.
United Kingdom	136-140		The generic indicator here seems very narrowly defined as it relates only to species inventories.	It is not clear what change is being suggested. No change to the proposed list of indicators has been

Reviewer	Row Number	Heading	Review Comment	Response
			The science and technology needed to support implementation of the Convention is much wider than that. The related specific indicators are therefore only a very small subset of the knowledge needed.	made.
United Kingdom	30/31		Should be considered as one indicator and cross-referenced to SDG. Are the same data sources and methods used? Should avoid having duplicating or competing indicators.	The indicators are different. They rely on different data sets and methodologies. One is based on country reports to the FAO the other is based on remote sensing information. They also measure different things. Hansen data focuses on tree cover while the FAO information is on forest cover. No change made to the proposed list of indicators.
United Kingdom	51/52		The two indicators appear to be quite similar. Do they depend on the same data sources? The indicators should avoid duplication and overlap, and where possible, share the same indicators as SDGs.	The SDG indicator wording has been updated to reflect the documentation prepared for the 47 <sup>th</sup> session of the United Nations Statistical Commision. It is not clear if there is overlap between the two indicators and/or if they can be combined. This should be reviewed once the SDG indicators discussions have concluded. No change to the proposed list of indicators has been made.
United Kingdom	55/56		The two indicators appear to be quite similar. Do they depend on the same data sources? The indicators should avoid duplication and overlap, and where possible, share the same indicators as SDGs.	The wording of the second indicators has been updated to reflect the documentation prepared for the 47 <sup>th</sup> session of the United Nations Statistical Commission. The indicators are different. One looks at the area under certification schemes the other looks at progress towards sustainable management more generally. The source of the data is also different. The first is prepared by the FSC the second is prepared by FAO based on national submissions. No change made to the proposed list of indicators.
United Kingdom	65/66/67		No scoring for these indicators? Data sources not clear. There appears to be some duplication between 66, 67 and 68.	Information for the three indicators, including their source has been added. The indicator in row 68 uses different underlying information and

Reviewer	Row Number	Heading	Review Comment	Response
				methodologies than the others. Therefore while they consider similar issues they are different.
United Kingdom	84/85		Not clear how the generic indicator and the specific indicators are directly relevant to Target 10. Target 10 refers to vulnerable ecosystems and their integrity it does not refer to species populations and extinction risk.	Species are part of ecosystems and species can be used as an indication of ecosystem health and integrity. It is not clear what change is being suggested. No change has been made to the proposed list of indicators.
United Kingdom	89/90		The two indicators appear to be quite similar. Do they depend on the same data sources? The indicators should avoid duplication and overlap, and where possible, share the same indicators as SDGs.	The indicators do appear to be similar. However as the discussions on the SDG indicators are ongoing it is not clear if they are. Once the SDG indicator process has concluded the list of proposed indictors will need to be revisited
United Kingdom	99/100		No scoring for these indicators? Data sources not clear.	The protected area connectedness index is being developed by UNEP and is under development. This has been reflected in the proposed list of indicator. The land/seascape connectedness indicator has been removed from the list.
University of Auckland, New Zealand	1	4	I note comments should consider the "current availability of the indicator and its underlying data". I agree these are important criteria. Without the data being easily accessible, which means published and open-access, it is impossible for anybody to verify the indicators and build on this data in the future. It should be made clear that it is unacceptable to say data are 'available on request' because this is usually not the case in practice (for a variety of reasons). Further, data publication implies some adherence to standards and quality assurance and GBIF is well-established to facilitate this.	Noted - No change required to the proposed list of indicators
University of Auckland, New Zealand	2	3 (Table)	It is not possible to assess any of the indicators properly because no information is provided as to whether any of the underlying data is publicly available, that is published and open-access.	Noted - No change required to the proposed list of indicators.
University	4	17	The data that support Red List assessments are	Noted - No change required to the proposed list

Reviewer	Row Number	Heading	Review Comment	Response
of Auckland, New Zealand			unavailable but should be made available through publication in GBIF. Where rare species locations need to be kept confidential to prevent illegal collection, the locations can be generalised and/or not published. However, they must still be available to future experts.	of indicators
University of Auckland, New Zealand	4	20-26	Additional indicators that are already monitored by many governments are 'River Quality Indicators' and 'Lake eutrophication'.  Freshwater species are more threatened than terrestrial and marine and this environment deserves more focus.	It is not clear if a global indicator exists or if one is being developed. No change to the proposed list of indicators has been made
University of Auckland, New Zealand	4	Row 10	This indicator should also be applied to Fisheries which get uneconomic subsidies from governments that perpetuate unsustainable fishing.	The indicator refers to that developed and maintained by the OECD. It is not clear if the proposed indicator currently exists or is being developed. No change to the proposed indicator has been made.
University of Auckland, New Zealand	7	38	Living Planet Index data are not published and despite promises, are not available to researchers in practice. BirdLife International does not publish the data used in its assessments either.	Noted - No change required to the proposed list of indicators.
University of Auckland, New Zealand	8	54	The proportion of aquaculture in sustainable production is a good idea.	Noted - No change required to the proposed list of indicators.
University of Auckland, New Zealand	10	65	Additional indicators that are already monitored by many governments are 'River Quality Indicators' and 'Lake eutrophication'. Freshwater species are more threatened than terrestrial and marine and this environment deserves more focus.	It is not clear if a global indicator exists or if one is being developed. No change to the proposed list of indicators has been made
University of Auckland,	10	71, 72	A new online database has been established that includes all marine IAS (World Register of Introduced Marine Species) and could provide	It is not clear if a global indicator exists or if one is being developed. No change to the proposed list of indicators has been made

Reviewer	Row Number	Heading	Review Comment	Response
New Zealand			this service. It has a permanent professional host institute, species taxonomy is integrated with the World Register of Marine Species, has an Editorial Board of experts, and has been endorsed by GEO BON and IUCN ISSG.	
University of Auckland, New Zealand	11	77	See above. These indicators seem similar and perhaps could be merged.	It is not clear if a global indicator exists or if one is being developed. No change to the proposed list of indicators has been made
University of Auckland, New Zealand	12	88	The percent cover of "protected areas" (PA) is too broad if many areas do not aim to fully protect biodiversity. The cover of areas that fully protect biodiversity (i.e. not take or harvesting so biodiversity is as natural as possible) must be distinguished from other PA.	The WDPA data allows for disaggregation by protected area type. The cover of protected areas has been retained to avoid having to list the different possible indicators individually.
University of Auckland, New Zealand	13	89	See above. Less than 6 % of Marine PA aim to protect biodiversity in a natural state. It is disgraceful that the total cover of all MPA is reported by the CBD when 94% of them allow fishing. Fully and partially protected areas must be separately reported.	The WDPA data allows for disaggregation by protected area type. The cover of protected areas has been retained to avoid having to list the different possible indicators individually.
University of Auckland, New Zealand	13	94	Coverage of areas that aim to be fully and partially protected must be separately reported. Enforcement is a separate issue but recognising areas that are not paper parks (the Green list) is also important.	The WDPA data allows for disaggregation by protected area type. The cover of protected areas has been retained to avoid having to list the different possible indicators individually.
University of Auckland, New Zealand	13	89-90	The WDPA is hopelessly managed. Stronger governance, an online system for content management, and transparency in countries reporting of PA, is urgently required. It needs a radical overhaul of how it is managed and long-term committed funding.	Noted - No change required to the proposed list of indicators.
University of Auckland,	19	136	I believe most data in the Barcode of Life are not publicly available. In contrast all data in GenBank are. But GenBank is not mentioned	It is not clear what indicator is being proposed or if an indicator exists. No changes have been made to the proposed list of indicators.

Reviewer	Row Number	Heading	Review Comment	Response
New			here. This indicator needs review in this context.	
Zealand				
University of Michigan (Lydia Beaudrot)	97	Available today (X) or under active development (Y)	X	The indicator has been included in the list under "trends in extinction risk and populations of species". In order to keep the proposed list to a manageable size, indicators have only been included once in the proposed list of indicators.
University of Michigan (Lydia Beaudrot)	97	Easy to communicate	X	The indicator has been included in the list under "trends in extinction risk and populations of species". In order to keep the proposed list to a manageable size, indicators have only been included once in the proposed list of indicators.
University of Michigan (Lydia Beaudrot)	97	Generic Indicator	Add one more indicator under Trends in effectiveness and/or equitability of management of protected areas.	The indicator has been included in the list under "trends in extinction risk and populations of species". In order to keep the proposed list to a manageable size, indicators have only been included once in the proposed list of indicators.
University of Michigan (Lydia Beaudrot)	97	Global indicator can be disaggregated to create national indicator	It can be, but it is limited by the number of sites in each country. As the TEAM network expands and Wildlife Insights (federated camera trap project – TEAM, CI, Smithsonian, WCS, North Carolina Museum of Natural Sciences) is implemented the number of data sets will grow.	The indicator has been included in the list under "trends in extinction risk and populations of species". In order to keep the proposed list to a manageable size, indicators have only been included once in the proposed list of indicators.
University of Michigan (Lydia Beaudrot)	97	National data are aggregated to form global indicator	Can be, but the minimum spatial unit is of aggregation is local data (at the level of a protected area or site).	The indicator has been included in the list under "trends in extinction risk and populations of species". In order to keep the proposed list to a manageable size, indicators have only been included once in the proposed list of indicators.
University of Michigan (Lydia Beaudrot)	97	Source	Tropical Ecology Assessment and Monitoring (TEAM) Network	The indicator has been included in the list under "trends in extinction risk and populations of species". In order to keep the proposed list to a manageable size, indicators have only been included once in the proposed list of indicators.
University of	97	Specific Indicator	The Wildlife Picture Index (disaggregated by protected area): When calculated at the scale of a	The indicator has been included in the list under "trends in extinction risk and populations of

Reviewer	Row Number	Heading	Review Comment	Response
Michigan (Lydia Beaudrot)			protected area, the WPI can measure the effectiveness of protected areas as actual conservation outcomes because its measures trends in biodiversity through time.	species". In order to keep the proposed list to a manageable size, indicators have only been included once in the proposed list of indicators.
University of Michigan (Lydia Beaudrot)	97	Used in GBO3/GBO4	No	The indicator has been included in the list under "trends in extinction risk and populations of species". In order to keep the proposed list to a manageable size, indicators have only been included once in the proposed list of indicators.
University of Michigan (Lydia Beaudrot)	107	Available today (X) or under active development (Y)	X	Change made
University of Michigan (Lydia Beaudrot)	107	Easy to communicate	X	Change made
University of Michigan (Lydia Beaudrot)	107	Generic Indicator	Add one more indicator under Trends in extinction risk and populations of species	Given that the indicator is available and has been published and is reflected in the Biodiversity Indicators Partnership, the indicator has been added to the proposed list.
University of Michigan (Lydia Beaudrot)	107	Global indicator can be disaggregated to create national indicator	It can be, but currently limited by the number of sites in each country. As the TEAM network expands and Wildlife Insights (federated camera trap project – TEAM, CI, Smithsonian, WCS, North Carolina Museum of Natural Sciences) is implemented the number of data sets will grow.	As the data set is currently limited, the indicator has not been noted as being disaggregated to national level. No change made to the proposed list of indicators.
University of Michigan (Lydia Beaudrot)	107	National data are aggregated to form global indicator	Can be, but the minimum spatial unit of aggregation is local data (at the level of a protected area or site).	As the data set is currently limited, the indicator has not been noted as being disaggregated to national level. No change made to the proposed list of indicators.

Reviewer	Row Number	Heading	Review Comment	Response
University of Michigan (Lydia Beaudrot)	107	Source	Tropical Ecology Assessment and Monitoring (TEAM) Network	Change made
University of Michigan (Lydia Beaudrot)	107	Specific Indicator	The Wildlife Picture Index: This is the only index included within the BIP that uses in situ primary data to monitor populations of ground-dwelling mammals and birds in tropical forests (see Beaudrot et al., 2015, O'Brien et al. 2008). It fills an important geographic gap for tropical forests globally and covers a critical group of species (about 300 between mammals and birds). It is also updated in near-real time (within months of data collection)	Given that the indicator is available and has been published and is reflected in the Biodiversity Indicators Partnership, the indicator has been added to the proposed list.
University of Michigan (Lydia Beaudrot)	107	Used in GBO3/GBO4	Included in Appendixes of GBO4.	Change made
Whitley Wildlife Conservati on Trust	97	Available today (X) or under active development (Y)	X	The indicator has been included in the list under "trends in extinction risk and populations of species". In order to keep the proposed list to a manageable size, indicators have only been included once in the proposed list of indicators.
Whitley Wildlife Conservati on Trust	97	Easy to communicate	X	The indicator has been included in the list under "trends in extinction risk and populations of species". In order to keep the proposed list to a manageable size, indicators have only been included once in the proposed list of indicators.
Whitley Wildlife Conservati on Trust	97	Generic Indicator	Add one more indicator under Trends in effectiveness and/or equitability of management of protected areas.	The indicator has been included in the list under "trends in extinction risk and populations of species". In order to keep the proposed list to a manageable size, indicators have only been included once in the proposed list of indicators.
Whitley	97	Global	It can be, but it is limited by the number of sites	The indicator has been included in the list under

Reviewer	Row Number	Heading	Review Comment	Response
Wildlife Conservati on Trust		indicator can be disaggregated to create national indicator	in each country. As the TEAM network expands and Wildlife Insights (federated camera trap project – TEAM, CI, Smithsonian, WCS, North Carolina Museum of Natural Sciences) is implemented the number of data sets will grow.	"trends in extinction risk and populations of species". In order to keep the proposed list to a manageable size, indicators have only been included once in the proposed list of indicators.
Whitley Wildlife Conservati on Trust	97	National data are aggregated to form global indicator	Can be, but the minimum spatial unit is of aggregation is local data (at the level of a protected area or site).	The indicator has been included in the list under "trends in extinction risk and populations of species". In order to keep the proposed list to a manageable size, indicators have only been included once in the proposed list of indicators.
Whitley Wildlife Conservati on Trust	97	Source	Tropical Ecology Assessment and Monitoring (TEAM) Network	The indicator has been included in the list under "trends in extinction risk and populations of species". In order to keep the proposed list to a manageable size, indicators have only been included once in the proposed list of indicators.
Whitley Wildlife Conservati on Trust	97	Specific Indicator	The Wildlife Picture Index (disaggregated by protected area): When calculated at the scale of a protected area, the WPI can measure the effectiveness of protected areas as actual conservation outcomes because its measures trends in biodiversity through time.	The indicator has been included in the list under "trends in extinction risk and populations of species". In order to keep the proposed list to a manageable size, indicators have only been included once in the proposed list of indicators.
Whitley Wildlife Conservati on Trust	97	Used in GBO3/GBO4	No	The indicator has been included in the list under "trends in extinction risk and populations of species". In order to keep the proposed list to a manageable size, indicators have only been included once in the proposed list of indicators.
Whitley Wildlife Conservati on Trust	107	Available today (X) or under active development (Y)	X	Change made
Whitley Wildlife Conservati on Trust	107	Easy to communicate	X	Change made

Reviewer	Row Number	Heading	Review Comment	Response
Whitley Wildlife Conservati on Trust	107	Generic Indicator	Add one more indicator under Trends in extinction risk and populations of species	Given that the indicator is available and has been published and is reflected in the Biodiversity Indicators Partnership, the indicator has been added to the proposed list.
Whitley Wildlife Conservati on Trust	107	Global indicator can be disaggregated to create national indicator	It can be, but currently limited by the number of sites in each country. As the TEAM network expands and Wildlife Insights (federated camera trap project – TEAM, CI, Smithsonian, WCS, North Carolina Museum of Natural Sciences) is implemented the number of data sets will grow.	As the data set is currently limited, the indicator has not been noted as being disaggregated to national level. No change made to the proposed list of indicators
Whitley Wildlife Conservati on Trust	107	National data are aggregated to form global indicator	Can be, but the minimum spatial unit of aggregation is local data (at the level of a protected area or site).	As the data set is currently limited, the indicator has not been noted as being disaggregated to national level. No change made to the proposed list of indicators
Whitley Wildlife Conservati on Trust	107	Source	Tropical Ecology Assessment and Monitoring (TEAM) Network	Change made
Whitley Wildlife Conservati on Trust	107	Specific Indicator	The Wildlife Picture Index: This is the only index included within the BIP that uses in situ primary data to monitor populations of ground-dwelling mammals and birds in tropical forests (see Beaudrot et al., 2015, O'Brien et al. 2008). It fills an important geographic gap for tropical forests globally and covers a critical group of species (about 300 between mammals and birds). It is also updated in near-real time (within months of data collection)	Given that the indicator is available and has been published and is reflected in the Biodiversity Indicators Partnership, the indicator has been added to the proposed list of indicators.
Whitley Wildlife Conservati on Trust	107	Used in GBO3/GBO4	Included in Appendixes of GBO4.	Change made
World Association of Zoos and	1–3	Specific Indicator	Another specific indicator of Aichi Biodiversity Target 1 worth considering is the WAZA global visitor survey (see Moss et al. 2015 attached and	In light of the publication and its previous use in Technical Series 78 the indicator was added to the proposed list of indicators.

Reviewer	Row Number	Heading	Review Comment	Response
Aquariums			reference below). We have previously discussed the use of this indicator at a global level with the CBD Secretariat, it was presented at SBSTAA 17 and it was referred to in CBD's assessment of progress towards the Aichi Biodiversity Targets (CBD Technical Series No. 78). Furthermore, as a member of the Interagency Task Force, we have kept the CBD Secretariat informed about our progress in using this indicator. We are thus confident that the results of the WAZA global visitor survey serve as a scientifically valid, readily available and broadly applicable indicator of Aichi Biodiversity Target 1.	
			Moss, A., Jensen, E. & Gusset, M. (2015) Evaluating the contribution of zoos and aquariums to Aichi Biodiversity Target 1. Conservation Biology 29: 537–544.	