Comments regarding meeting documents for Ad hoc Technical Expert Group on Indicators for the Strategic Plan for Biodiversity 2011-2020

The Indicators AHTEG has been tasked with two significant pieces of work:

- the identification of a small set of indicators for measuring global progress toward the Aichi Targets, and
- to prepare guidance on indicators and approaches for monitoring progress at regional and finer levels.

Regarding the first task, documents prepared for the AHTEG, and particularly UNEP/CBD/ID/AHTEG/2015/1/2 and UNEP/CBD/ID/AHTEG/2015/1/INF/1, focus on listing existing indicators, identifying gaps in coverage, and options to improve the comprehensiveness of reporting at the global level. This does not align to the first task of the AHTEG. Rather, the requirement for a *small* set of indicators requires finding or developing indicators that contain sufficient information to provide an indication of progress for a group of related target elements. Examples of such indicators include the Red List Index and the Living Planet Index, which, with their subindices, are already being used as indicators for multiple targets.

One possible approach would be to identify 1-3 indicators for each of the broad areas of progress required under the Strategic Plan. A possible breakdown might include i) mainstreaming biodiversity, ii) sustainable production and harvest of biological resources, iii) ecosystem (or habitat) extent and condition, iv) biodiversity trends, v) equity in benefit sharing, and vi) resources for biodiversity conservation. The land degradation indicator described in UNEP/CBD/ID/AHTEG/2015/1/INF/5 seems an excellent candidate as it would summarize change in condition for a suite of ecosystems. An alternate approach might be to complete development of new indicators explored in UNEP/CBD/ID/AHTEG/2015/1/INF/6 to assess progress towards Targets over time; sensitivity of such indicators will need to be increased and some suggestions are included in the section below.

With a small set of indicators, it is impossible to be comprehensive. Assessment of progress towards individual target elements will continue to depend on drawing information from a range of sources and supporting indicators, as was done for GBO-4. However, in some cases building a narrative using a range of sources is more appropriate than the use of global-level indicators. For example, the existing global indicators for Target 1 (Biodiversity Barometer, Google trends) have a strong Western academic perspective; they depend on the recognition of a technical term. Many cultures intimately aware of the importance of biodiversity would not necessarily use that term – aboriginal communities in Canada, for example, have strong traditions that value biodiversity highly, but individuals generally refer to the importance of "the land." National or subnational indicators are more likely to be able to capture these nuances.

The second task of the AHTEG will benefit from completion of the first task. Indicators selected as part of the small global set can be expected to have considerable institutional support and available guidance which can be adapted to regional and national levels. National reporting will require a larger suite of indicators, but the small global set could be considered a preferred group likely to be have lower implementation costs.

Meeting documents providing lists of existing indicators and datasets that might support development of new indicators support the second task. Guidance should build on these lists, assessing scientific quality (including criteria such as credibility, accuracy, and concordance with local and indigenous knowledge) and fitness-for-purpose ("Does the indicator measure the right thing?") as well as pointing to sources for data, methodology, and appropriate interpretation. Initial guidance developed at the AHTEG should be circulated to experts and Parties for comment; this will generate a richer assessment of the utility of each potential indicator and allow Parties to identify areas in which they would like greater guidance. Plain language writing and creating multiple documents (grouping potential indicators by Goal or area of expertise required, for example) would encourage greater participation.

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The indicators explored here are useful only to assess progress over time. Differences in aggregated progress between Targets are not of interest: all targets must be achieved. Knowing whether a target is on track to be met is sufficient for Convention purposes. Measuring the significance of differences in global rates of progress among Targets does not inform decision-making; actions are undertaken by Parties and it is only at this level where priorities can sensibly be established.

The document makes a strong case for analysis of ordinal data as if it were interval. While the paper notes that this is frequently done, it should be noted that the assignment of values to categories is in fact a modelling step, and the subsequent statistical analysis is done on the model results. For the Red List Index, for example, there is an explicit assignment of societal value for the extinction categories, such that the difference between Vulnerable and Endangered is of equal importance to the difference between Least Concern and Near Threatened, and so on.

A weakness of the current formulation is that the most frequent category is "progress but at insufficient rate," and the indicator is not sensitive to whether there has been a small or large amount of progress. For the data transformation shown in Table 3, this is equivalent to treating all scores of "progress but at insufficient rate" as if they were all exactly halfway towards "on track to meet." Key information is masked, changes will be difficult to detect and the utility of the indicator is therefore reduced. Given the decision to use an interval scale, however, additional information could be captured: the approximate degree of progress towards each target could be assessed (ideally by Parties themselves) on a scale of, say, 0-100% achieved ("on track to exceed" would be expressed as >100%, moving away from the target would be expressed as negative percentages). Many of the estimates will be rough - this is to be expected given the complexity of the Targets – and in some cases it is likely that no more precise

estimate would be possible. Despite significant remaining uncertainty, it would represent an improvement from the current formulation.