



Strasbourg, 26th March 2024

T-PVS/Inf(2024)10

CONVENTION ON THE CONSERVATION OF EUROPEAN WILDLIFE
AND NATURAL HABITATS

**Working Group on overseeing implementation of the
Bern Convention Strategic Plan to 2030**

Advancing work on indicators for the Strategic Plan

*Document prepared by
Dave Pritchard, independent consultant*

INTRODUCTION

The Terms of Reference for the Working Group ([T-PVS\(2023\)31](#)), as agreed by the Standing Committee at its 43rd meeting in 2023, include a task to assist the Standing Committee in “*further advancing technical work on the Monitoring Framework and indicators for the Strategic Plan, in particular indicators relating to the Emerald Network, including management planning and management effectiveness (taking into account for example the methodology for assessing management effectiveness of Natura 2000 sites developed by the European Commission), as support for the implementation of relevant targets in the Strategic Plan*”.

Section E of the Strategic Plan addresses the issue of implementation monitoring and evaluation. It emphasises the importance of reviewing progress, assessing whether the Strategic Plan is achieving what it set out to do, and demonstrating its impact. Results at interim stages should inform a process of learning and adaptive management, to keep the Plan “on course” for the achievement of its targets and goals.

The Plan defines a suite of sixteen agreed indicators to be used for this, in relation to the eleven targets in the Plan. Each listed indicator is accompanied by some brief notes on the approach suggested for its operation.

In this context, the Convention’s Parties have endorsed an overarching principle of making as much use as possible of information from existing processes in the Bern Convention and in other related biodiversity monitoring systems, mindful that no unnecessary reporting burdens should be created. They have also noted that the monitoring framework’s purpose is to assess progress in achieving the Plan, not to assess the achievements of individual Parties or other contributors to the Plan’s delivery. The suggested approach to operation of the indicators has been guided by this.

In May 2022, the Working Group on developing a Vision and Strategic Plan for the Bern Convention was provided with an extensive 34-page document on “*Monitoring and evaluation of the Strategic Plan – potential indicators of progress towards the targets*”. The draft targets under consideration at that time evolved slightly as work advanced towards eventual adoption of the final Plan in 2023, but much of the initial thinking in that document remains applicable to the indicators that have now been agreed.

The present document provides a similar (but briefer) treatment of the potential approach to the indicators as now adopted, with various details updated where necessary. The “approach” notes already provided in Section E of the Strategic Plan are included verbatim here as well, for ease of reference. The glossary that forms Annex 3 to the Plan may help with the interpretation of particular terms.

This is therefore offered as a starting point for a more concentrated effort by the current Working Group to elaborate the exact desired specification for each of the indicators and their method of operation.

Section E of the Strategic Plan makes reference to a “Monitoring & Evaluation Guide” that is intended to accompany the Plan. Although this intention was expressed at an early stage of the previous Working Group’s work, the Guide has not yet been produced, and there is therefore a need now to decide on its scope and the practical steps for its production.

Taking the above into account, **the Working Group is invited to:**

- (i) advise on further updating and expansion of the details provided in the boxes below;
- (ii) define the practical process steps required to bring each of the indicators into full operation;
- (iii) consider the relative operational readiness of each of the indicators, and a timeline for expected generation of results from each of them;
- (iv) comment on the most effective ways of working in conjunction with the parallel *ad hoc* Working Group on Reporting; and
- (v) offer suggestions on the way forward for the anticipated “Monitoring & Evaluation Guide”.

SUMMARY OF THE SUGGESTED APPROACH TO THE 16 AGREED INDICATORS

GOAL 1: The area, connectivity, integrity and resilience of natural and semi-natural ecosystems is increased including through protected areas and other effective area-based conservation measures covering at least 30% of the land and of the sea areas.

TARGET 1.1

Natural and semi-natural ecosystems are maintained and where possible restored or rehabilitated, leading to an overall increase in area, connectivity, integrity and resilience of the natural habitats referred to in the Convention and in Resolution No. 4 (1996).

Agreed indicators

- **1.1.a Trends in extent and condition of selected habitat and ecosystem types.**
- **1.1.b Extent of degraded ecosystems under restoration (by ecosystem type).**

“Approach” notes in Section E of the Plan

Principal sources for proposed indicator 1.1.a include reporting on conservation status under Bern Convention Resolution No. 8 (2012) and under the EU Nature Directives (Birds Directive Article 12, Habitats Directive Article 17), accounts compiled for the UN SEEA Ecosystem Accounting process and associated indicators for the Global Biodiversity Framework. Extent and condition will each be assessed separately, but the “headline” result can be presented in terms of overall “favourable”/ “unfavourable” status for both components together.

Selected other notes from 2022 document (partly adapted/updated March 2024)

[Re trends & condition]

This would be a cluster of several indicators, each addressing a key ecosystem type for which extent and condition data are available. Further detailed consideration of the nature of these datasets will determine whether it is preferable to address specific sub-types separately, or to group them at a more generic level (for example peatlands, saltmarshes, lakes, etc., as opposed to all wetlands combined).

Trends in extent and trends in condition each have different levels of measurement feasibility and they may be presented separately, but the “headline” measure would seek to provide a result for both components together (potentially in terms of overall “favourable”/ “unfavourable” status).

[Re extent of restoration]

This would need some development, but at least for some ecosystem types, an inventory of successful restoration projects and the areas they have restored (or lengths, for linear systems such as rivers or wildlife corridors) could be compiled, in relation to defined time periods. The indicator would be heavily influenced by the likely variability in awareness of relevant projects and recording effort from place to place, so would be useful for quantifying levels of success overall, and to an extent to indicate trends over time; but it should not be used for making comparisons between countries.

Any relevant existing measures that could be used, drawn upon or adapted

Bern Convention Parties are already expected to assess and report on the area and condition of habitats at the national level, under Resolution No. 8 (2012). For Parties that are Member States of the European Union this is accomplished via the reports they submit to the European Commission under Article 17 of the EU Habitats Directive. Based on these the Commission also produces composite reports for the Union as a whole. For other countries, a reporting process was trialled

under the Bern Convention in 2018-19, and is intended to become a regular process in future. The two processes are harmonised, to give coverage at a pan-European level. Area and condition for each habitat type in each country are assessed as “favourable” or (two levels of) “unfavourable”, plus a trend (improving/ deteriorating/ stable/ unknown).

The “headline” indicators proposed for Global Biodiversity Framework (GBF) Goal A at global level include “Extent of selected natural and modified [/managed] ecosystems”, based on the country-by-country ecosystem extent accounts compiled for the UN Statistical Commission’s System of Environmental-Economic Accounting (SEEA) Ecosystem Accounting (<https://seea.un.org/ecosystemaccounting>). These accounts document area and change in area (in absolute and percentage terms) for ecosystems classified according to the IUCN Global Ecosystem Typology. As a global portmanteau indicator this is still in development, including the inclusion of a “condition” element; but certain components of the picture can be supplied by other existing indicators, such as “Forest area as a proportion of total land area” (Indicator 15.1.1 for the UN Sustainable Development Goals), “Change in the extent of water-related ecosystems over time” (SDG indicator 6.6.1, used also by the Ramsar Convention), and the Red List of Ecosystems (<https://www.iucnrl.org/>).

A Global Ecosystem Restoration Index was developed for Target 15 in the Aichi Biodiversity targets and could be considered for the restoration indicator suggested here, but it tracks overview information on ecosystem attributes assumed to benefit from restoration, rather than directly reporting actual restoration interventions.

Sources of data that could be used

(See “existing measures” section above).

In addition, concerning restoration, the Framework for Ecosystem Restoration Monitoring (FERM) (<https://data.apps.fao.org/ferm/>) is a platform that provides access to geospatial information related to ecosystem restoration, together with applications for monitoring. It is progressively expanding, and is designed to support the UN Decade on Ecosystem Restoration.

Baseline for measurement of the indicators, if relevant

For the proposed ecosystem extent and condition indicator and information that is compiled annually, a baseline date of [2023] will provide a basis for inferences about the impact of the implementation of Target 1.1 in the Strategic Plan. A longer time-series, back-casting to earlier dates, would provide broader temporal trend context for interpreting the results. Loss of ecosystem area may be a time-lagged consequence of progressively deteriorating condition, so results for the latter should offer earlier/more sensitive indications of conservation concern.

Both EU Habitats Directive reports and Bern Convention “Resolution No. 8 (2012)” reports are (/will be) generated at six-yearly intervals.

Elements of the UN SEEA-EA system have data going back to 1992.

For the proposed restoration indicator, the baseline would be the first year of reporting. Every project included would be associated with a completion date, so double-counting between reporting periods would be avoided.

Who could be primarily responsible for operating the indicators

National government focal points.

Any other comments on how the indicator information could be generated and reported

[None]

TARGET 1.2

Coverage of natural habitats by the Emerald Network meets the sufficiency targets set for 2030 in the post-2020 Work Plan for the Network.

Agreed indicator

- **1.2 Emerald Network Sufficiency Index.**

“Approach” notes in Section E of the Plan

This indicator uses the index developed for the Emerald Network Monitoring Framework, based on sufficiency assessments that are already provided for under the Emerald process.

Selected other notes from 2022 document (partly adapted/updated March 2024)***Any relevant existing measures that could be used, drawn upon or adapted***

Under a mandate from the Bern Convention Standing Committee, a Monitoring Framework for the Emerald Network is being developed which includes the description of the Sufficiency Index that is proposed here as an indicator for Target 1.2 (see <https://rm.coe.int/pa02e-proposal-monitoring-framework-emerald/16809fb019>). The detail of the sufficiency targets for 2030 are in the process of being defined by the Group of Experts on Protected Areas and Ecological Networks, and these would be incorporated into the Index once agreed.

Sources of data that could be used

(See “existing measures” section above).

Baseline for measurement of the indicator, if relevant

The indicator is not dependent on a baseline – it simply measures the distance to the stated 2030 target at a given time.

Who could be primarily responsible for operating the indicator

Lead agencies for implementing the Emerald Network in each country, and at European level, the Bern Convention’s Emerald Network data analysis advisers, working in cooperation with the European Environment Agency for EU-related data.

Any other comments on how the indicator information could be generated and reported

Results will be summarised in publicly-available form (*inter alia*) via the online “Emerald Barometer” (<https://www.coe.int/en/web/bern-convention/emerald-network-barometer>).

TARGET 1.3

All sites included in the Emerald Network are effectively managed and subject to formal protection and other effective area-based conservation measures.

Agreed indicators

- **1.3 (a) Extent to which protected areas and other effective area-based conservation measures (OECMs) cover Emerald Network sites.**
- **1.3 (b) Proportion of adopted Emerald Network sites with implemented management plans.**

“Approach” notes in Section E of the Plan

The first indicator compares spatial data on Emerald Network sites with progressively updated spatial datasets on protected areas and OECMs. Inclusion of OECMs (in the target) means that relevant measures are not limited to legal protection designations. The intent of the first indicator

is to focus specifically on coverage, as the most readily measurable and comparable element of the target.

The second indicator similarly focuses on coverage by management plans, but requires that in order to be counted, such plans must not merely exist, but must demonstrably be being implemented in practice. Where possible it will also be desirable to collect any existing information on assessments of the effectiveness of such implementation, and there are various existing tools available for this (e.g. METT, R-METT, RAPPAM, PAME, MEPCA).

Selected other notes from 2022 document (*partly adapted/updated March 2024*)

Any relevant existing measures that could be used, drawn upon or adapted

The standard data form for Emerald Sites includes an “optional” section for recording “site protection status”, and some information on the issue is registered in this way. Subsequently however the format developed for regular reporting under Bern Convention Resolution No. 8 (2012) aims more systematically to gather information from each country on the extent to which “necessary conservation measures have been established [...] and are applied”. It also asks for information on the extent to which “conservation measures have been set out in a comprehensive management plan or a similar instrument” (although discussion on this has noted that the existence of a plan is not in itself necessarily evidence of effective measures being applied).

Summary country-by-country data on the overlap between Emerald Network sites and national designations is also compiled by the European Environment Agency – see for example <https://www.eea.europa.eu/ims/nationally-designated-terrestrial-protected-areas> .

“Protected Area coverage” has been a global indicator reported against Target 11 in the Aichi Biodiversity targets, and is linked to SDG indicators 14.5.1, 15.1.2 and 15.4.1 (see for example https://www.bipindicators.net/indicators/coverage-of-protected-areas-terrestrial-and-marine#national_use).

“Coverage of protected areas and OECMs” is proposed as a headline indicator for Target 3 in the draft Monitoring Framework for the Global Biodiversity Framework; and “protected area coverage of Key Biodiversity Areas [and/or Ecologically or Biologically Significant Areas] is proposed as a component indicator.

There are several established indicators of *protected area management effectiveness* which could support the assessment of this target.

Sources of data that could be used

Emerald Network database; cross-analysed with digital polygons for protected areas from the World Database on Protected Areas, and digital polygons from the World Database on Other Effective Area-based Conservation Measures (OECMs).

Baseline for measurement of the indicators, if relevant

It would be possible to operate this indicator independently of a baseline, since it is a “distance to target” measure. Establishing a baseline however would allow it in addition to be used as a “rate of progress” tracker. For those countries that have supplied relevant data so far (via the Emerald datasheet, or via the trial “Resolution No. 8 (2012) reporting” round in 2018-19), their data could already constitute such a baseline for them. Whenever the reporting becomes operational in a more general way, this element could be scaled-out to all Parties.

Who could be primarily responsible for operating the indicators

Source data provided by national focal points; compilation undertaken by the Bern Convention’s Emerald Network data analysis advisers, working with datasets compiled by UNEP-WCMC (WDPA and WDOECMs) and IUCN (Protected Planet, with UNEP-WCMC) and potential input from BirdLife International (World Database of Key Biodiversity Areas).

Any other comments on how the indicator information could be generated and reported

[None]

TARGET 1.4

The habitats that the Emerald Network aims to conserve are being maintained at, or progressing towards, a satisfactory conservation status.

Agreed indicator

- **1.4 Contribution of the Emerald Network to the conservation status of habitats.**

“Approach” notes in Section E of the Plan

The indicator would be expressed as the overall contribution of the Emerald Network to the conservation status of key habitats, in categories used for reporting under Bern Convention Resolution No. 8 and EU Nature Directive reports under Article 12 (Birds Directive) and Article 17 (Habitats Directive), in (based on status categories such as “satisfactory stable”, “stable but at risk”, “unsatisfactory improving” or “unsatisfactory declining”).

Selected other notes from 2022 document (*partly adapted/updated March 2024*)***Any relevant existing measures that could be used, drawn upon or adapted***

The format for reporting under Resolution No. 8 (2012), as used in the 2018-19 reporting trial (see <https://rm.coe.int/reporting-format-for-the-period-2013-2018/168073fa26>) includes data fields for providing contextual information on the conservation status of habitats in each country as a whole. More specifically of relevance for Target 1.4, however, it also includes fields for:

- short-term trend of habitat area in good condition within the Emerald Network (stable/increasing/decreasing/uncertain/unknown).

As noted in the proposal for a Monitoring Framework for the Emerald Network, however (see <https://rm.coe.int/pa02e-proposal-monitoring-framework-emerald/16809fb019>), there are significant doubts about whether the intended Framework could make meaningful use in this respect of the data reported under Resolution No. 8 (2012). The need for a new indicator has accordingly already been suggested in that context.

Sources of data that could be used

(See “existing measures” section above).

Note also that the standard datasheet for individual Emerald Network sites (Appendix to Resolution No. 5 (1998), updated in 2013) provides for the relevant habitats (Resolution No. 4 (1996)) to be documented at the outset for each Emerald Network site.

Baseline for measurement of the indicator, if relevant

As a trend-based measure, the indicator for this target requires comparisons between different time periods. Baselines for this if necessary could conceivably be different in different countries, noting that national Emerald Network site lists have been established at a range of different start-dates.

The standard datasheet for Emerald Network sites (see under “sources of data” above) includes a field for recording, at the outset, the “degree of conservation of the structure and functions of the natural habitat type concerned, and restoration possibilities”. This has some potential to inform the position concerning the conservation status (satisfactory/favourable or otherwise) of the site, but is not really sufficient as a baseline for the indicator proposed here. An assessment in the specific terms of the indicator would therefore need to be made at a decided starting-date for assessing the future trend, in each given country. This may be available in some cases from existing monitoring

regimes; but in the absence of any such starting-point, the default baseline for the purposes of the Strategic Plan would be an assessment conducted in [2024].

Who could be primarily responsible for operating the indicator

National Emerald Network focal points, and the Bern Convention's Emerald Network data analysis advisers.

Any other comments on how the indicator information could be generated and reported

Given the links with reporting under Resolution No. 8 (2012) and with the proposed Monitoring Framework for the Emerald Network, input on the suggestions advanced here for an indicator for this target might usefully be solicited from the Bern Convention's Group of Experts on Protected Areas and Ecological Networks (the next meeting of which is scheduled for 15 June 2022).

Positive results from the indicator on this target could potentially also be reported in terms of the "conservation outcomes" part of the IUCN global Green List of Protected and Conserved Areas, as part of its indicator 4.1.1 (see <https://www.iucn.org/theme/protected-areas/our-work/iucn-green-list-protected-and-conserved-areas>).

TARGET 1.5

Specific recommendations arising from individual Case Files are followed up and acted upon; and cases are resolved and closed within a reasonable timeframe, taking account of any advice provided by the Standing Committee.

Agreed indicators

- **1.5.a [Indicator based on statistics concerning Case File recommendations (e.g. proportion implemented, partially implemented, not yet implemented)].**
- **1.5.b [Indicator based on statistics concerning numbers of Case Files (e.g. numbers per country; number of years each case has been on Standing Committee agendas)].**

"Approach" notes in Section E of the Plan

Operation based on reports provided to the Standing Committee, and resulting decisions of the Committee.

Selected other notes from 2022 document (partly adapted/updated March 2024)

Any relevant existing measures that could be used, drawn upon or adapted

Mainly documents provided as agenda papers for Standing Committee meetings; and the reports of the meetings.

Sources of data that could be used

(See "existing measures" section above).

Baseline for measurement of the indicators, if relevant

For the purpose of the Strategic Plan, the performance against this target should in principle be assessed against a baseline assessment conducted [at the end of 2024]. Whether such an assessment will be possible has not yet been established.

The proposed indicator could in any event be meaningful as a single assessment (without necessarily being a "trend indicator"), or it could be operated as a series of single assessments, either by comparison with an initial baseline or by being operated on a "rolling window" basis.

Who could be primarily responsible for operating the indicators

Bern Convention Secretariat or commissioned external advisers, in support of the Standing Committee.

Any other comments on how the indicator information could be generated and reported

Reflections on the operation of the Case File system, options for a future statistical “barometer”, and a potential dedicated study, are under consideration in parallel with the current work. The eventual operation of the indicators for this target will need to be informed by the scope of the future possibilities defined by these other processes.

GOAL 2: The conservation status of threatened species is improved, the abundance of native species has increased, and human-induced extinctions have been halted.

TARGET 2.1

The species listed in the Appendices to the Bern Convention and in Appendix 1 to Resolution No. 6 (1998) are at or are recovering towards a satisfactory conservation status.

Agreed indicator

- **2.1 Conservation status of species, as reported under Resolution No. 8 (2012).**

“Approach” notes in Section E of the Plan

This indicator will draw directly on a synthesis of information provided through the process operated under Resolution No. 8 (2012). (For Parties that are Member States of the European Union this is accomplished via the reports they submit to the European Commission under Article 17 of the EU Habitats Directive and Article 12 of the EU Wild Birds Directive). A variety of aggregation/ disaggregation options is possible.

Selected other notes from 2022 document (*partly adapted/updated March 2024*)***Any relevant existing measures that could be used, drawn upon or adapted***

Bern Convention Parties are already expected to assess and report on the conservation status of species at the national level, under Resolution No. 8 (2012). For Parties that are Member States of the European Union this is accomplished via the reports they submit to the European Commission under Article 17 of the EU Habitats Directive and Article 12 of the EU Wild Birds Directive. Based on these the Commission also produces composite reports for the Union as a whole. For other countries, a reporting process was trialled under the Bern Convention in 2018-19, and is intended to become a regular process in future. The two processes are harmonised, to give coverage at a pan-European level. In the trial, conservation status of species was assessed as “favourable” or (two levels of) “unfavourable” plus a trend (improving/ deteriorating/ stable/ unknown), presented according to biogeographical regions. Distribution trends were also calculated, and categorised as “stable”, “fluctuating”, “increasing”, “declining” or “uncertain”.

The format for reporting under Resolution No. 8 (2012), as used in the 2018-19 reporting trial (see <https://rm.coe.int/reporting-format-for-the-period-2013-2018/168073fa26>) includes data fields for providing information on the distribution, trend of any change in distribution, population size, population trend (stable/ increasing/ decreasing/ uncertain/ unknown), and a chosen “favourable reference population” (for making comparisons).

Arising from a difference in the reporting approach under the two EU Directives, the report format for birds (as opposed to habitats and other species) does not include any conclusion about conservation status. The database includes the data necessary to make the conclusion, but this step

is not required from the countries. Guidance has been provided on how countries might do this (see <https://rm.coe.int/reporting-under-resolution-no-8-2012-period-2013-2018-final-report/16809fad04>), but otherwise it is currently done by BirdLife International and IUCN.

Sources of data that could be used

(See “existing measures” section above).

Both the EU Directives reports and the Bern Convention “Resolution No. 8 (2012)” reports are (/will be) generated at six-yearly intervals.

Baseline for measurement of the indicator, if relevant

As a trend-based measure, the indicator for this target requires comparisons between different time periods.

A baseline date of [2023] will provide a basis for inferences about the impact of the implementation of Target 2.1 in the Strategic Plan. The three global indices suggested here have been in existence for many years, however, and a longer time-series back-casting to earlier dates with these would provide broader temporal trend context for interpreting the results.

The format for reporting under Resolution No. 8 (2012) includes a data field for providing information on a chosen “favourable reference population” (as a reference comparison for judging conservation status.).

Who could be primarily responsible for operating the indicator

National Bern Convention focal points, and the Convention’s data analysis advisers.

Any other comments on how the indicator information could be generated and reported

For species covered by adopted Species Action Plans or recovery programmes, (additional) data might usefully be drawn from whatever monitoring regime is established in those plans and programmes, and could be reported for this target individually for each species/group of species so covered, in conjunction with the indicator results as defined above.

TARGET 2.2

Anthropogenic causes of actual or potential negative effects on the conservation status of species of wild flora and fauna¹ are reduced as far as possible to levels that are not detrimental to the conservation and recovery of those species, through targeted measures enacted in legislation, policy and/or management.

¹ Including in particular (though not limited only to) habitat loss and degradation, including loss of connectivity; illegal killing, taking and trade; unsustainable use; toxins and pollution, including micropollutants; barriers to migration, disturbance, light pollution, invasive alien species; and climate change.

Agreed indicator

- **2.2 Trends in frequency and severity of key anthropogenic pressures impacting on species of wild flora and fauna, as reported under Resolution No. 8 (2012) and the EU nature Directives.**

“Approach” notes in Section E of the Plan

To be drawn from the information that Parties are already expected to assess and report under Resolution No. 8 (2012). (For Parties that are Member States of the European Union this is accomplished via the reports they submit to the European Commission under Article 17 of the EU Habitats Directive and Article 12 of the EU Wild Birds Directive).

Selected other notes from 2022 document (partly adapted/updated March 2024)

Any relevant existing measures that could be used, drawn upon or adapted

Bern Convention Parties are already expected to assess and report on pressures (and threats) at the national level, under Resolution No. 8 (2012). For Parties that are Member States of the European Union this is accomplished via the reports they submit to the European Commission under Article 17 of the EU Habitats Directive and Article 12 of the EU Wild Birds Directive. Based on these the Commission also produces composite reports for the Union as a whole. For other countries, a reporting process was trialled under the Bern Convention in 2018-19, and is intended to become a regular process in future. The two processes are harmonised, to give coverage at a pan-European level.

The format for reporting under Resolution No. 8 (2012), as used in the 2018-19 reporting trial (see <https://rm.coe.int/reporting-format-for-the-period-2013-2018/168073fa26>) includes data fields for providing information on pressure and threat factors, separately for those impacting on species and those impacting on habitats. A hierarchical list of over 400 factors (https://cdr.eionet.europa.eu/help/natura2000/Documents/Ref_threats_pressures_FINAL_20110330.xls) is used for identifying both “pressures” and “threats”, the distinction between these being that pressures are deemed to be “factors acting now” and threats are deemed to be “factors expected to act in the future”. Each factor is then further graded for its “intensity” as either “high” or “medium”. (The question of revising this to add an option for recording “low” intensity factors has also been raised more recently). Syntheses can then present a summary of the reported frequencies of each pressure and threat (grouped at higher levels of the typology) and allow comparisons between countries, between reporting periods, and between species and habitats affected. (See also <https://rm.coe.int/explanatory-notes-and-guidelines-for-the-period-2013-2018-part-1-the-r/16808d336f>).

For the purpose of the suggested indicator for Target 2.2, focusing narrowly only on “pressures” (the term used in the target), in the sense of the “now versus future” definition, may artificially exclude information that would be better included, and the Working Group may wish to consider either interpreting the term “pressures” to embrace also “threats” in line with the proposed reporting under Resolution No. 8 (2012), or to amend the wording of the target to make such an approach explicit.

A number of indicators (or monitoring systems that could produce them) are available that address specific categories of pressures, including for example illegal killing of birds, spread of invasive species, density of floating plastic debris, by-catch of vulnerable and non-target species, illegal trade in the CITES context, Red List Index (impacts of utilization), Red List Index (impacts of fisheries), the human ecological footprint, and the monitoring regimes for Key Biodiversity Areas and Important Bird Areas. Given the more all-embracing and Bern-specific opportunity presented by the Resolution No. 8 (2012) reporting process described above, however, there would appear to be less merit in developing a derivative of any of these to support an indicator for Target 2.2.

Sources of data that could be used

(See “existing measures” section above).

In addition to the expected regular reporting of pressure information under Resolution No. 8 (2012), there could be a case for supplementing this with occasional one-off studies addressing specific pressures, or occasional questionnaire surveys allowing Parties to provide more of a narrative overview of the threats and pressures in their country.

Baseline for measurement of the indicator, if relevant

The baseline for assessing progress towards the target would be the first fully implemented round of reporting under Resolution No. 8 (2012) according to the [2024 reporting protocols], completed as close as possible to the date of adoption of the Strategic Plan.

Who could be primarily responsible for operating the indicator

National Bern Convention focal points, and the Convention's data analysis advisers.

Any other comments on how the indicator information could be generated and reported

Where information is available on the reasons why a recorded reduction in a given pressure came about, it could be useful to explore ways of capturing this in association with the indicator, to offer at least some illumination on the “causal activities” element of the target.

GOAL 3: The contributions of wild flora and fauna and their natural habitats to a safe, clean, healthy and sustainable environment are valued, maintained and enhanced.

TARGET 3.1

The natural environment thrives, thereby benefiting people's livelihoods, food and water security, community resilience, well-being and quality of life.

Agreed indicators

- **3.1.a Nature-based quality of life assessment (qualitative summary overview).**
- **3.1.b Trends in air quality.**
- **3.1.c Trends in water quality.**

“Approach” notes in Section E of the Plan

The first indicator will be based on national overview narratives self-reported by each Party, extracted from relevant findings of national ecosystem assessments where applicable, or from the national environmental-economic accounts compiled for the UN Statistical Commission and used for monitoring the related targets in the Global Biodiversity Framework. “Nature-based quality of life” in this sense is a proxy or “umbrella” measure for the individual components referred to in Target 3.1. Although a qualitative indicator, it would be generated at periodic intervals and include a commentary on trends (improvement/ deterioration) from time to time. This addresses some new measurement issues for the Bern Convention, so it will be helpful to review this indicator after an initial phase of operating it, to assess its utility.

The air and water quality indicators are based on the indicator approaches for these issues developed by the OECD and the European Commission.

Selected other notes from 2022 document (partly adapted/updated March 2024)***Any relevant existing measures that could be used, drawn upon or adapted***

Measurement of the components of this target lies generally in the realm of assessments of ecosystem services. Ways of measuring various individual issues such as water quality, status of pollinators, forest productivity, fish stocks etc. exist, but would only reflect a small segment of what the target is aiming for. More integrated *national ecosystem assessments* would offer good potential; although these are not yet a universal feature in all countries (see <https://www.ecosystemassessments.net/>).

The “headline” indicators proposed for Global Biodiversity Framework (GBF) Goal B at global level include “National environmental [economic] accounts of ecosystem services”, based on the country-by-country accounts compiled for the UN Statistical Commission's System of Environmental-Economic Accounting (SEEA) Ecosystem Accounting (<https://seea.un.org/ecosystemaccounting>). This indicator is still in development, and at present is not operational for general use. Countries will make their own individual choice of which ecosystem services to include (from a global reference list); though if an approach along these

lines were adapted for use in the Bern Convention context, there could be some agreement among the Convention's Parties as to a common "core set" of priority services to be included by all, for this purpose.

Concerning the target's reference to food security, the UN Food & Agriculture Organisation uses indicators of undernourishment and food insecurity in its annual publication of *The State of Food Security and Nutrition in the World*, but this is more related to indicators of diet, nutritional health and equitable access to food than it is to links with ecosystem services; and it is more relevant to regions of the world other than Europe. The *Global Food Security Index*, operated by Economist Impact, considers issues of food affordability, availability, quality and safety, but it recently added a further issue category covering "natural resources and resilience". Under this category the index expresses a country's exposure to the impacts of climate change, natural resource risks and land and water quality issues, as factors affecting food security.

Concerning the target's reference to water security, the OECD has developed several water security indicators. Some of these focus on access to safe drinking water, which may (as with related indicators developed by the Asian Development Bank) be based more on the state of water treatment infrastructures, than on the provision of ecosystem services. Included however are two indicators that address "available renewable natural resources (surface water, groundwater) and related abstraction rates", and "the ratio between the volume of water abstracted and total volume of available freshwater resources".

Concerning the target's reference to community resilience, measures relating to this have addressed issues such as levels of education, health and employment, which are not so relevant to the intent of the target. Others that have more of a link to environmental factors also have an emphasis on socioeconomics and built infrastructure, although "natural infrastructure" sometimes also features – but this is generally in the context of disaster risk management, and so is perhaps more relevant to Target 3.2 than to the present target.

Concerning the target's references to well-being and quality of life, the European Commission (through Eurostat) has defined several domains within which to measure quality of life, one of which is the "natural and living environment". Measures in this domain however have mainly been developed in relation specifically to pollution, and particularly air pollution (see https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Quality_of_life_indicators_-_natural_and_living_environment). The OECD has an operational "better life index", but its environmental components are similarly focused on air quality and water quality (see <https://www.oecdbetterlifeindex.org/topics/environment/>). Water quality measures might also be derived in EU countries from monitoring under the Water Framework Directive. Apart from this, there are numerous research studies on the relationship between the natural environment and people's well-being, including mental health; but seemingly no corresponding indicators of this in general use that would fit the purpose here.

Sources of data that could be used

(See "existing measures" section above).

Baseline for measurement of the indicators, if relevant

This will vary according to the different suggested measures that might eventually be used. In principle, to demonstrate progress over the period of the Strategic Plan, baselines for each indicator should be established as close as possible to the date of adoption of the Plan; but earlier baselines will be usefully informative about longer-term trends. In the case of ecosystem services assessments, it is possible that some countries may only achieve a single full national assessment in the lifetime of the Plan, rather than being able to generate a trend indicator from repeated assessments.

Who could be primarily responsible for operating the indicators

This will vary between the different indicators, but will rest mainly with the particular national authorities that are responsible for generating the information in each related sector.

Any other comments on how the indicator information could be generated and reported

[None]

TARGET 3.2

Conservation and sustainable use of nature contributes positively to measures relating to human rights, democracy, landscape management, cultural heritage and physical and mental health, and to the prevention and mitigation of major hazards.

Agreed indicator

- **3.2 Single review assessment of the contribution made by the conservation and sustainable use of nature under the Bern Convention to other fields of action under the Council of Europe.**

“Approach” notes in Section E of the Plan

To remain within the scope of the target, the “other fields of action” referred to in this indicator are limited to those relating to human rights, democracy, landscape, cultural heritage, health, and the prevention and mitigation of major hazards.

Target 3.2 could potentially be achieved by a positive result for each of its components being recorded once during the timespan of the Strategic Plan, since it does not express a trend or “maintenance” objective. The “single assessment” method has therefore been chosen as the most cost-effective indicator for this target. The Council of Europe’s reporting on the Bern Convention’s contribution to the UN Agenda for Sustainable Development will form one input to this.

The “contribution” to be assessed by this indicator would include both the promotion of benefits and the prevention or mitigation of harms.

Selected other notes from 2022 document (partly adapted/updated March 2024)

Any relevant existing measures that could be used, drawn upon or adapted

Full identification of potential measures is subject to further analysis of processes under each of the relevant Council of Europe instruments, policies and programmes - see “measurable components” above.

UNESCO has developed an “index of development of the standard-setting framework for the protection and promotion of culture, cultural rights and cultural diversity”, and an “index of development of the policy and institutional framework for the protection and promotion of culture, cultural rights and cultural diversity”. The first of these has been suggested as a complementary indicator for Goal B in the Global Biodiversity Framework; but both of them appear to lack the element of the contribution made by the conservation and sustainable use of nature.

Other relevant indicators suggested for the Global Biodiversity Framework include several based on the UN Statistical Commission’s System of Environmental-Economic Accounting (SEEA) Ecosystem Accounting. These include one on ecosystem services involving protection from hazards and extreme events (proposed as a headline indicator for GBF draft Target 11), drawing on the defined service categories of (*inter alia*) landslide mitigation, flood control and storm mitigation. Data sources for this are however yet to be developed, and the indicator is not yet fully operational. Complementary indicators proposed for GBF Goal B, also based on the UN SEEA-EA system, include “nature’s regulating contributions including climate regulation, disaster prevention and others” and “nature’s non-material contributions including cultural”. These however are currently only proposals.

Sources of data that could be used

(See “existing measures” section above).

Baseline for measurement of the indicator, if relevant

Since the proposal is to assess this target by means of a single assessment, the issue of a baseline does not arise.

Who could be primarily responsible for operating the indicator

The Secretariat of the Bern Convention, most likely by contracting external consultancy support, and in consultation with other Departments of the Council of Europe.

Any other comments on how the indicator information could be generated and reported

The simplest option for the envisaged assessment would be for it to be compiled at European level, in relation to the institutions and processes of the Council of Europe. Consideration might be given however to whether it could (also) be generated by information from Parties, on (for example) policy integration and cross-sectoral coordination at national level.

Account will need to be taken of the fact that not all Bern Convention Parties are Parties to the other instruments, and *vice-versa*, so the eventual international assessment will have a caveat that it is not based on a 100% cross-match in this respect.

TARGET 3.3

Nature-based solutions and ecosystem-based approaches implemented by Bern Convention Parties contribute to the mitigation of climate change and the adaptation to its effects.

Agreed indicator

- **3.3 Number of initiatives involving nature-based solutions or ecosystem-based approaches as reported in Nationally Determined Contributions under the UNFCCC, with ecosystem extent data where available.**

“Approach” notes in Section E of the Plan

To be synthesised from data reported as part of the Nationally Determined Contributions (NDCs) submitted by countries to the Secretariat of the UNFCCC (United Nations Framework Convention on Climate Change). In the timespan of the Bern Strategic Plan, submission of these NDCs will occur only once; hence the indicator is formed from a single assessment.

“Nature-based solutions” is interpreted in accordance with the definition adopted by the UN Environment Assembly (UNEA Resolution 5.5, 2022), and “ecosystem-based approaches” is interpreted in accordance with the definition included in the Glossary to the Global Biodiversity Framework. The analysis of NDC data, in line with the UNEA definition, will treat as eligible only those “nature-based solutions” that are beneficial for biodiversity.

Selected other notes from 2022 document (partly adapted/updated March 2024)***Any relevant existing measures that could be used, drawn upon or adapted***

The draft Monitoring Framework for the Global Biodiversity Framework (GBF) includes a component indicator for GBF Goal B that would address “nature’s regulating contributions including climate regulation, disaster prevention and others” (based on information reported via the UN Statistical Commission’s System of Environmental-Economic Accounting Ecosystem

Accounting, SEEA-EA). In the context of the GBF goal, however, this mainly concerns the way in which nature provides the ecosystem service of climate regulation once the nature has been conserved, rather than addressing conservation actions (nature-based solutions and ecosystem-based approaches, in the terms of the present target) that are designed specifically to achieve climate-related outcomes.

Target 8 in the GBF refers *inter alia* to "...contribute to mitigation and adaptation through ecosystem-based approaches ...", but the indicators suggested for this mainly measure aspects such as the resulting emissions, rather than the contribution made by ecosystem-based approaches. The closest they approach to the latter is one suggested component indicator that refers *inter alia* to "national adaptation plans ... that reflect biodiversity".

There has also been a proposal to consider an indicator for the GBF on the "restoration of carbon-rich ecosystems" (such an indicator is not yet in existence); but this dimension in this general sense is probably better considered for present purposes in the context of Target 1.1. It could be possible however to conceive of a restoration indicator that isolates projects/initiatives undertaken specifically to achieve climate change mitigation or adaptation objectives.

The "Global Set of Climate Change Statistics and Indicators" developed under the UN Framework Convention on Climate Change (UNFCCC) (158 indicators, over 300 metrics) includes three measures for an indicator entitled "Nature-based adaptation"; but in a similar way to the GBF ones mentioned above, these measures (to be reported via the UN SEEA-EA system) relate to the way in which nature supports adaptation via ecosystem services such as flood mitigation and coast protection, rather than the impact of conservation actions in producing these outcomes.

The indicators for the UN Sustainable Development Goals include indicator 13.2.1 "Number of countries with nationally determined contributions, long-term strategies, national adaptation plans and adaptation communications, as reported to the Secretariat of the UNFCCC". These strategies, plans and communications may include information on nature-based solutions and ecosystem-based approaches, and the UNFCCC Secretariat maintains a database containing the documents that are submitted to it by Parties – but the indicator itself tracks only the number of countries doing so, and does not express anything about the content of the documents.

There have however been several one-off studies analysing the nature-based solutions (NbS) content of the submitted Nationally Determined Contributions (NDCs), each using a different methodology. A review of these studies (<https://www.iucn.org/theme/climate-change/resources/key-publications/strengthening-nature-based-solutions-national-climate-commitments>) concluded that NDCs rarely include measurable targets or indicators against which progress on climate action through NbS can be tracked, and it recommended that work be done to fill this gap. In the meantime this study-based approach probably offers the greatest potential for a relevant measure for Target 3.3.

Sources of data that could be used

Nationally Determined Contributions submitted under the UNFCCC, and a synthesis review of their NbS and EbA-related content.

Baseline for measurement of the indicator, if relevant

Since the proposal is to assess this target by means of a single assessment, the issue of a baseline does not arise.

Who could be primarily responsible for operating the indicator

Compiler(s) of one-off study; to be determined.

Any other comments on how the indicator information could be generated and reported

[None]

GOAL 4: Sufficient resources are available and are used efficiently to achieve all goals and targets in this Plan.

TARGET 4.1

Sufficient resources and capacity, including scientific and technical cooperation, are available to achieve all the goals and targets in the Strategic Plan for the Bern Convention

Agreed indicator

- **4.1 Resources and capacity available at international level for implementing the Strategic Plan, as assessed for each financial planning period by the Standing Committee.**

“Approach” notes in Section E of the Plan

This indicator only partially covers the various components required for achievement of the target, but it focuses on the most feasible way of generating a relevant and consistently repeatable measure. (Clearly for example the goals and targets of the Strategic Plan cannot be achieved by actions only at the international level; but measurement beyond this is challenging). Summary data on the overall total budgets for operating the Convention, and available capacity in terms of the Secretariat, Groups of Experts, training initiatives and other resources can be generated by the Secretariat, but these will mainly be reported via other existing processes rather than specifically within the context of the Strategic Plan.

Selected other notes from 2022 document (partly adapted/updated March 2024)

Any relevant existing measures that could be used, drawn upon or adapted

Summary data on the overall total budgets for operating the Convention, and available capacity in terms of the Secretariat, Groups of Experts, training initiatives and other resources (see under “measurable components” above) can be generated by the Secretariat.

The funding environment for the Bern Convention continues to be a matter for discussion of future options, in parallel with the current development of the Strategic Plan. Components of the options under review include methods for assessing the extent to which the contribution from the Council of Europe’s Ordinary Budget needs to be complemented by voluntary contributions by the Parties, scale-based annual calculations for suggesting what the amount of such contributions might be from each Party, and determination by the Standing Committee for each financial period of the appropriate financial resources for the implementation of the Convention’s Programme of Work. These processes would offer a starting-point for defining the “sufficiency” reference comparison (at the purely international level) that is required for monitoring Target 4.1.

The Monitoring Framework for the Global Biodiversity Framework (GBF) includes a proposed headline indicator for GBF Goal D that would address “funding for implementation of the Global Biodiversity Framework”, and it is conceived as capturing national-level data as well as international-level data. This indicator is currently only a concept and does not yet exist, but it has been suggested that countries would be able to report the national data in future through the national reports to the Convention on Biological Diversity and/or through dedicated questionnaire-based surveys.

The GBF Monitoring Framework also includes a proposed headline indicator for its Target 19 that would address “public expenditure and private expenditure on conservation and sustainable use of biodiversity and ecosystems”. The CBD’s financial reporting framework (CBD COP Decision XII/3) already collects some of the information necessary to calculate this indicator, although it

was developed in the context of Aichi Biodiversity Target 20 and does not yet capture information on private sector expenditure. Adaptation of it to inform the monitoring of GBF Target 19 is however seen by CBD Parties as feasible for the future.

Sources of data that could be used

(See “existing measures” section above).

Baseline for measurement of the indicator, if relevant

The first of the envisaged assessments could be undertaken in the year following adoption of the Strategic Plan, and performance could then be considered as part of each subsequent budgeting cycle. The indicator is however primarily designed to inform a “distance to target” judgement (the target in this sense being “sufficiency”), and so the issue of baselines is not critical.

Who could be primarily responsible for operating the indicator

The Standing Committee, in conjunction with the Secretariat.

Any other comments on how the indicator information could be generated and reported

[None]