**Review Comment Template for the document on indicators for the draft goals and targets of the post-2020 global biodiversity framework**

Parties and stakeholders are invited to make suggestions of indicators (currently available or under development) that may be used to measure progress towards the post-2020 framework. The draft components and elements of the monitoring framework for the post-2020 global biodiversity framework are based on updated draft goals and targets, as was requested by the second meeting of the OEWG, and presented in document <https://www.cbd.int/sbstta/sbstta-24/post2020-monitoring-en.pdf>.

Please note: there are two tables in this document, one for suggestions for indicators for the draft monitoring elements of goals, and another table for indicators for the draft monitoring elements of targets

**Instructions for providing input on indicators and completion of indicator tables (for goals and targets):**

* Please do not add columns to the tables below
* Please add rows for additional indicators related to monitoring elements for specific components from goals (table 1) and components from targets (table 2). The information of draft components and monitoring elements for goals and targets is available in document <https://www.cbd.int/sbstta/sbstta-24/post2020-monitoring-en.pdf>
* To add an indicator for specific monitoring elements, please provide the following information:
  + Column 1: copy/paste the component of the goal (enter information in table 1) or target (enter information in table 2) from <https://www.cbd.int/sbstta/sbstta-24/post2020-monitoring-en.pdf>, which the indicator can be used for. This MUST be provided
  + Column 2: copy/paste the specific monitoring element of the goal (enter information in table 1) or target (enter information in table 2), which the indicator can be used for from <https://www.cbd.int/sbstta/sbstta-24/post2020-monitoring-en.pdf>. This MUST be provided
  + Column 3: the published or accepted name of the indicator. This MUST be provided
  + Column 4: the name of the organisation(s) responsible for producing the indicator and keeping it up to date. This MUST be provided
  + Column 5: please state whether the indicator is ready for use today (with an X) or if is still under development (Y). This MUST be provided
  + Column 6: if you are adding a new indicator that is still under development, please indicate the year that you expect it to be available
  + Column 7: for any existing indicator, please add the year of the last update
  + Column 8: please provide the time series for the indicator and frequency of update (e.g. 1990-2020, available every 5 years).
  + Column 9: please state (Y or N) whether there is a published methodology for application of the indicator at the national level
  + Column 10: please state (Y or N) whether any new or existing indicator can be disaggregated at the national level for use by Parties
  + Column 11: please state (Y or N) whether the indicator is aggregated from data that is collected at the national level (e.g. with data from national institutions)
  + Column 12: please state (Y or N) whether any indicator has been used in the 4th Edition of the Global Biodiversity Outlook (GBO-4).
  + Column 13: please state (Y or N) whether the indicator is currently included in the SDG indicator framework and provide the SDG indicator number
  + Column 14: please state whether an indicator is used for any Multi-Lateral Environmental Agreements other than the CBD (e.g. Ramsar Convention, CMS) or is used as an indicator by IPBES, by writing the abbreviated name of the MEA or process
  + Column 15: please enter any further information or relevant links
* Example entries have been provided in the tables below for goals and targets, please follow the same format for each indicator entry
* Inputs should be sent by e-mail to[*secretariat@cbd.int*](mailto:secretariat@cbd.int)no later than 25 July 2020

**Table 1. Indicators for monitoring elements of the draft goals (with example entries) UNEP/Mediterranean Action Plan**

| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** | **14** | **15** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Components of the draft Goals**  **(copy/paste text from** [**CBD/SBSTTA-24/post-2020-monitoring.en.pdf**](https://www.cbd.int/sbstta/sbstta-24/post2020-monitoring-en.pdf)**)** | **Goal Monitoring Elements**  **(copy/paste text from** [**CBD/SBSTTA-24/post-2020-monitoring.en.pdf**](https://www.cbd.int/sbstta/sbstta-24/post2020-monitoring-en.pdf)**)** | **Indicator name** | **Responsible Institution for the indicator** | **Available today (X) or under active development (Y)** | **Date of availability for indicator in development (Year)** | **Year of last update (e.g. 2019)** | **Time series and frequency of updates (e.g. 1985-2019, annually)** | **Methodology available for national use (Y/N)** | **Global indicator can be disaggregated for national use (Y/N)** | **National data aggregated to form global indicator (Y/N)** | **Used in GBO-4 (Y/N)** | **SDG indicator (Y/N)** | **Indicator used to measure other MEAs or processes (e.g. Ramsar Convention, IPBES, CMS)** | **Comments** |
| *GA1. Increased extent of natural ecosystems (terrestrial, freshwater and marine ecosystems)* | *Trends in area of forest ecosystems* | *Forest area as a percentage of total land area* | *FAO* | *X* |  | *2020* | *1990-2015* | *Y* | *Y* | *N* | *N* | *Y*  *SDG indicator 15.1.1* |  |  |
| *GA4. Increase the number and health of common species* | *Trends in species abundance* | *Living Planet Index (LPI)* | *ZSL/WWF* | *X* |  | *2020* | *1970-2020, available every 2 years* | *Y* | *Y* | *N* | *Y* | *N* | *CMS, Ramsar, IPBES* |  |
| … |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *GA1. Increased extent of natural ecosystems (terrestrial, freshwater and marine ecosystems)* | *Trends in area of coral reefs (Mediterranean coralligenous)* | Habitat distributional range to also consider habitat extent as a relevant attribute (related to the Mediterranean coralligenous) | UNEP/MAP-SPA/RAC | X |  | 2017 | Interval of 3 to 6 years | Y | Y |  |  |  |  | The Baseline of this indicator was determined in the 2017 Mediterranean Quality Status Report (MED QSR) which is the first assessment report produced at the regional scale using the common indicators elaborated under the Ecosystem Approach process of the Barcelona Convention. Data used from national institutions and regional/international organisations (ACCOBAMS, GFCM, etc.)  The next MED QSR will be published on 2023 |
|  | *Trends in area of seagrass ecosystems* | Habitat distributional range to also consider habitat extent as a relevant attribute (related to seagrass ecosystems) | UNEP/MAP-SPA/RAC | X |  | 2017 | Interval of 3 to 6 years | Y | Y |  |  |  |  |
|  | *Trends in area of other marine and coastal*  *ecosystems* | Habitat distributional range to also consider habitat extent as a relevant attribute (related to other marine and coastal ecosystems) | UNEP/MAP-SPA/RAC | X |  | 2017 | Interval of 3 to 6 years | Y | Y |  |  |  |  |
|  | *Trends in wetlands* | Habitat distributional range to also consider habitat extent as a relevant attribute (related to other marine and coastal ecosystems) | UNEP/MAP-SPA/RAC | X |  | 2017 | Interval of 3 to 6 years | Y | Y |  |  |  |  |
| *GA2. Ecosystem integrity and*  *connectivity (terrestrial,*  *freshwater and marine*  *ecosystems)* | *Trends in fragmentation and quality of*  *coral reefs* | Habitat distributional range to also consider habitat extent as a relevant attribute  &  Condition of the habitat’s typical species and communities | UNEP/MAP-SPA/RAC | X |  | 2017 | Interval of 3 to 6 years  &  Every 3 years | Y | Y |  |  |  |  | Besides these 2 common indicators, other indicators will be further developed under the ecosystem approach process of the Barcelona convention to assess the impact of the anthropogenic pressures on the benthic ecosystems (Ecological objective 6: Sea-floor integrity is maintained, especially in priority benthic habitats) |
|  | *Trends in fragmentation and quality of*  *other marine and coastal ecosystems* | Condition of the habitat’s typical species and communities  &  Condition of the habitat’s typical species and communities | UNEP/MAP-SPA/RAC | X |  | 2017 |  | Y | Y |  |  |  |  |
| *GA4. Increase the population and*  *health of species* | *Trends in species abundance* | Population abundance of selected species related to marine mammals (Cetaceans and the Mediterranean monk seal), seabirds & marine reptiles | UNEP/MAP-SPA/RAC | X |  | 2017 | Annually | Y | Y |  |  |  | For cetacean, ACCOBAMS | Under the Ecosystem Approach process of the Barcelona Convention, two other indicators are considered :   * Species distributional range (related to marine mammals, seabirds, marine reptiles); & * Population demographic characteristics (e.g. body size or age class structure, sex ratio, fecundity rates, survival/mortality rates related to marine mammals, seabirds, marine reptiles); |
| *GA6. Protection of critical*  *ecosystems* | *Trends in area of coastal and marine areas*  *conserved* | Area of coastal and marine ecosystems under protection and conservation  Surface overlap between  Designations  Proportion of each theoretical EEZ covered by MPAs | UNEP/MAP-SPA/RAC & MedPAN | X |  | 2017 | 2008-2019 (every four years) | Y | Y | Y |  |  |  |  |  |
|  | *Trends in areas of particular importance for*  *biodiversity conserved* | Area covered by nationally designated MPAs  Proportion of each theoretical EEZ covered by MPAs | UNEP/MAP-SPA/RAC & MedPAN | X |  | 2017 | 1959-2019 (every four years since 2008) | Y | Y | Y |  |  |  |  |
|  | *Trends in areas of particular importance for*  *ecosystem services conserved* | Area of coastal and marine ecosystems under protection and conservation  Surface overlap between  Designations | UNEP/MAP-SPA/RAC & MedPAN | X |  | 2017 | 2008-2019 (every four years) | Y | Y | Y |  |  |  |  |
|  | *Trends in ecological representativeness of areas conserved* | Proportion of EMODnet seabed habitats covered by MPAs  Proportion of each habitat type covered by MPAs (coralligenous, Cymodocea and Posidonia beds)  MPA coverage within each EBSA.  Proportion of each Cetacean Critical Habitat covered by MPAs  Proportion of each depth zone covered by MPAs  Proportion of each Mediterranean ecoregion covered by MPAs | UNEP/MAP-SPA/RAC & MedPAN | X |  | 2017 | 2008-2019 (every four years) | Y | Y | Y |  |  |  | Areas where several designations overlap were counted only once in the calculation of the total coverage within an EBSA , hence the fact that the latter cannot be obtained by simply adding up all individual coverages. |

**Table 2. Indicators for monitoring elements of the draft targets (with example entries) UNEP/Mediterranean Action Plan**

| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** | **14** | **15** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Components of the draft Targets**  **(copy/paste text from** [**CBD/SBSTTA-24/post-2020-monitoring.en.pdf**](https://www.cbd.int/sbstta/sbstta-24/post2020-monitoring-en.pdf)**)** | **Target Monitoring Elements**  **(copy/paste text from** [**CBD/SBSTTA-24/post-2020-monitoring.en.pdf**](https://www.cbd.int/sbstta/sbstta-24/post2020-monitoring-en.pdf)**)** | **Indicator name** | **Responsible Institution for the indicator** | **Available today (X) or under active development (Y)** | **Date of availability for indicator in development (Year)** | **Year of last update (e.g. 2019)** | **Time series and frequency of updates (e.g. 1985-2019, annually)** | **Methodology available for national use (Y/N)** | **Global indicator can be disaggregated for national use (Y/N)** | **National data aggregated to form global indicator (Y/N)** | **Used in GBO-4 (Y/N)** | **SDG indicator (Y/N)** | **Indicator used to measure other MEAs or processes (e.g. Ramsar Convention, IPBES, CMS)** | **Comments** |
| *T1.2. Prevention of reduction*  *and fragmentation of natural*  *habitats due to land/sea use*  *change* | *Trends in extent and rate of change of coral reefs* | Habitat distributional range  Condition of the habitat’s typical species and communities | UNEP/MAP-SPA/RAC | X |  | 2017 | Interval of 3 to 6 years  &  Every 3 years | Y | Y |  |  |  |  | to also consider habitat extent as a relevant attribute  Besides these common indicators, other indicators will be further developed under the ecosystem approach process of the Barcelona convention to assess the impact of the anthropogenic pressures on the benthic ecosystems (Ecological objective 6: Sea-floor integrity is maintained, especially in priority benthic habitats) |
|  | *Trends in extent and rate of change of seagrass*  *ecosystems* | Habitat distributional range  Condition of the habitat’s typical species and communities  Condition of the habitat’s typical species and communities | UNEP/MAP-SPA/RAC | X |  | 2017 |  | Y | Y |  |  |  |  |
|  | *Trends in extent and rate of change of wetlands* | Location and extent of the habitats impacted directly by hydrographic alterations  Length of coastline subject to physical disturbance due to the influence of man-made structures | UNEP/MAP-PAP/RAC | X |  | 2017 |  | Y | Y |  |  |  |  | to also feed the assessment on habitat extent; |
| *T1.5. Maintenance and*  *restoration of connectivity of*  *natural ecosystems* | *Trends in habitat connectivity* | Number of habitat patches located within MPAs, and average number of related patches within the distance range defined | UNEP/MAP-SPA/RAC & MedPAN | X |  | 2017 | 2008-2019 (every four years) | Y | Y | Y |  |  | HELCOM | (coralligenous, Cymodocea and Posidonia beds) |
| *T2.1. Area of terrestrial,*  *freshwater and marine*  *ecosystem under protection*  *and conservation* | *Trends in extent of protected areas* | Area covered by nationally designated MPAs  Proportion of each theoretical EEZ covered by MPAs | UNEP/MAP-SPA/RAC & MedPAN | X |  | 2017 | 1959-2019 (every four years since 2008) | Y | Y | Y |  |  |  |  |
|  | *Trends in extent of areas under other area-based*  *conservation measures* | Area of coastal and marine ecosystems under protection and conservation  Surface overlap between  Designations  Proportion of each theoretical EEZ covered by MPAs | UNEP/MAP-SPA/RAC & MedPAN | X |  | 2017 | 2008-2019 (every four years) | Y | Y | Y |  |  |  |  |
| *T2.3. Representative system*  *of protected areas and other*  *effective area-based*  *conservation measures* | *Trends in ecological representativeness of areas*  *conserved* | Proportion of EMODnet seabed habitats covered by MPAs  Proportion of each habitat type covered by MPAs (coralligenous, Cymodocea and Posidonia beds)  MPA coverage within each EBSA.  Proportion of each Cetacean Critical Habitat covered by MPAs  Proportion of each depth zone covered by MPAs  Proportion of each Mediterranean ecoregion covered by MPAs | UNEP/MAP-SPA/RAC & MedPAN | X |  | 2017 | 2008-2019 (every four years) | Y | Y | Y |  |  |  | Areas where several designations overlap were counted only once in the calculation of the total coverage within an EBSA , hence the fact that the latter cannot be obtained by simply adding up all individual coverages. |
|  | *Trends in proportion of protected areas and other*  *effective area based conservation measures*  *under various governance regimes* | Area of coastal and marine ecosystems under protection  and conservation | UNEP/MAP-SPA/RAC & MedPAN | X |  | 2017 | 2008-2019 (every four years) | Y | Y | Y |  |  |  |  |
| *T2.5. Connectivity within the*  *system of protected areas and*  *other effective area-based*  *conservation measures* | *Trend in connectivity of protected areas and*  *other effective area-based conservation*  *measures* | Number of habitat patches located within MPAs, and average number of related patches within the distance range defined | UNEP/MAP-SPA/RAC & MedPAN | X |  | 2017 | 2008-2019 (every four years) | Y | Y | Y |  |  | HELCOM | (coralligenous, Cymodocea and Posidonia beds) |
| *T3.2. Reduced human-wildlife*  *conflicts* | *Trend in human-wildlife conflicts* | Bycatch of vulnerable and non-target species | GFCM | Y | 2023  (estimated) |  |  | Y | Y |  |  |  |  |  |
|  | *Trends in proportion of biological resources*  *harvested within the established harvest limits* | Total landing  &  Catch per unit of effort (CPUE) or Landing per unit of effort (LPUE) as a proxy | GFCM | X |  | 2017 | Annually | Y | Y |  |  |  |  |  |
| *T5.1. Identification, control*  *and management of*  *pathways for introduction of*  *invasive alien species* | *Trends in timely identification of pathways for*  *introduction* | Trends in abundance, temporal occurrence, and spatial distribution of non-indigenous species, particularly invasive, non-indigenous species, notably in risk areas (in relation to the main vectors and pathways of spreading of such species); | UNEP/MAP-SPA/RAC | X |  | 2017 | Annually | Y | Y |  |  |  |  |  |
| *T5.2. Effective detection,*  *identification, prioritisation*  *and monitoring of invasive*  *alien species* | *Trends and efficiency of detection of invasive*  *alien species* | Trends in abundance, temporal occurrence, and spatial distribution of non-indigenous species, articularly invasive, non-indigenous species, notably in risk areas (in relation to the main vectors and pathways of spreading of such species); | UNEP/MAP-SPA/RAC | X |  | 2017 | Annually | Y | Y |  |  |  |  |  |
|  | *Trends in identification of invasive alien species* | Trends in abundance, temporal occurrence, and spatial distribution of non-indigenous species,  particularly invasive, non-indigenous species, notably in risk areas (in relation to the main vectors  and pathways of spreading of such species); | UNEP/MAP-SPA/RAC | X |  | 2017 | Annually | Y | Y |  |  |  |  |  |
|  | *Trends monitoring of invasive alien species* | Trends in abundance, temporal occurrence, and spatial distribution of non-indigenous species, particularly invasive, non-indigenous species, notably in risk areas (in relation to the main vectors and pathways of spreading of such species); | UNEP/MAP-SPA/RAC | X |  | 2017 | Annually | Y | Y |  |  |  |  |  |
| *T6.1. Reduction of pollution*  *from excess nutrients* | *Trends in levels of pollution from nitrogen* | Concentration of key nutrients in water column  Chlorophyll-a concentration in water column | UNEP/MAP-MEDPol | X |  | 2017 | Annually | Y | Y |  |  |  |  |  |
|  | *Trends in levels of pollution from phosphorus* | Concentration of key nutrients in water column  Chlorophyll-a concentration in water column | UNEP/MAP-MEDPol | X |  | 2017 | Annually | Y | Y |  |  |  |  |  |
|  | *Trends in levels of pollution from excess*  *pesticides* | Concentration of key harmful contaminants measured in the relevant matrix | UNEP/MAP-MEDPol | X |  | 2017 | Annually | Y | Y |  |  |  |  | related to biota,  sediment, seawater |
|  | *Trends in levels of pollution from excess other*  *biocides* | Concentration of key harmful contaminants measured in the relevant matrix | UNEP/MAP-MEDPol | X |  | 2017 | Annually | Y | Y |  |  |  |  | related to biota,  sediment, seawater |
| *T6.3. Reduction of pollution*  *from plastic* | *Trends in levels of pollution with marine plastic* | Trends in the amount of litter washed ashore and/or deposited on coastlines  Trends in the amount of litter in the water column including microplastics and on the seafloor  Candidate Indicator: Trends in the amount of litter ingested by or entangling marine organisms focusing  on selected mammals, marine birds and marine turtles | UNEP/MAP-MEDPol | X  Y | ? | 2017 | Annually | Y | Y |  |  |  |  | including analysis of its  composition, spatial distribution and, where possible, source |
| *T6.4. Reduction of pollution*  *from other sources* | *Trends in levels of pollution from organic*  *wastes* | Chlorophyll-a concentration in water column  Chlorophyll-a concentration in water column  Percentage of intestinal enterococci concentration measurements within established standards | UNEP/MAP-MEDPol | X |  | 2017 | Annually | Y | Y |  |  |  |  |  |
|  | *Trends in levels of pollution from lead* | Level of pollution effects of key contaminants where a cause and effect relationship has been  established  Actual levels of contaminants that have been detected and number of contaminants which have  exceeded maximum regulatory levels in commonly consumed seafood | UNEP/MAP-MEDPol | X |  | 2017 | Annually | Y | Y |  |  |  |  |  |
|  | Trends in levels of pollution from noise | Candidate indicator: Proportion of days and geographical distribution where loud, low, and mid-frequency impulsive sounds exceed levels that are likely to entail significant impact on marine animals  Candidate indicator: Proportion of days and geographical distribution where loud, low, and mid-frequency impulsive sounds exceed levels that are likely to entail significant impact on marine animals | UNEP/MAP-MEDPol | y | ? | 2017 | Annually | Y | Y |  |  |  | CMS/ACCOBAMS |  |
|  | Trends in levels of pollution from sediments | Concentration of key harmful contaminants measured in the relevant matrix | UNEP/MAP-MEDPol | X |  | 2017 | Annually | Y | Y |  |  |  |  | related to biota,  sediment, seawater |
|  | Trends in the levels of hazardous waste | Level of pollution effects of key contaminants where a cause and effect relationship has been established  Actual levels of contaminants that have been detected and number of contaminants which have exceeded maximum regulatory levels in commonly consumed seafood  Occurrence, origin (where possible), and extent of acute pollution events | UNEP/MAP-MEDPol  UNEP/MAP-REMPEC | X |  | 2017 | Annually | Y | Y |  |  |  |  | e.g. slicks from oil, oil  products and hazardous substances) and their impact on biota affected by this pollution |
| *T8.1. Sustainable*  *management of aquatic wild species of fauna and flora,*  *including fisheries* | *Trends in fish stocks* | Spawning stock Biomass (related to commercially exploited species) | GFCM | X | 2017 | Annually |  | Y | Y |  |  |  |  |  |
|  | *Trends in population and extinction risk in*  *bycatch species* | Bycatch of vulnerable and non-target species | GFCM | Y | 2023  (estimated) |  |  | Y | Y |  |  |  |  |  |
|  | *Trends in Invertebrate stocks* | Spawning stock Biomass (related to commercially exploited species) | GFCM | X |  | 2017 | Annually | Y | Y |  |  |  |  |  |