12th Session of the UNECE Joint Task Force on Environmental Indicators
17-18 November 2016

EEA note for Agenda point 4.

Reviewing statistics and indicators on biodiversity

This note provides a short overview of some developments regarding biodiversity indicators at the European Environment Agency (EEA) and ongoing within Eionet, as well as comments on the biodiversity-related list of the UNECE set of Environmental indicators.

1. SEBI - Streamlining European Biodiversity Indicators

The Streamlining European Biodiversity Indicators initiative was set up in 2006 to provide a set of biodiversity indicators for Europe to measure progress towards the target of halting biodiversity loss in Europe by 2010. Since the adoption of the 2020 EU and global targets, SEBI has contributed to various assessments and reports, confirming the relevance of SEBI indicators. However, it also became clear that the existing set needs to be thoroughly reviewed to ensure stronger alignment with the 2020 targets assessment needs.

The review started in 2016, with a first meeting of the new SEBI 2020 Indicator Project Group held in July in Copenhagen. This group includes the EEA and the European Topic Centre (ETC) on biodiversity, the European Commission DG Environment and the Joint Research Centre, as well as UNEP-WCMC as the Biodiversity Indicators Partnership secretariat.

The overarching purpose of the indicator set review is to meet the expected requirements of the 2019/2020 reporting on the EU 2020 Biodiversity Strategy as well as the global Strategic Plan for Biodiversity 2011-2020. The review should also increase streamlining with other biodiversity-relevant indicator frameworks, in particular under the Convention on Biological Diversity (CBD), the Sustainable Development Goals (SDG) and the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES). In addition to the review of the current set, SEBI is also carrying out a gap analysis to identify areas where more knowledge and indicators may be needed and to attempt to anticipate future policy priorities and goals.

2. Comments on the biodiversity indicators from the UNECE set of Environmental Indicators proposed for discussion at the 12th session

D1: protected areas
This is one of EEA indicators, SEBI 007: Nationally designated protected areas
http://www.eea.europa.eu/data-and-maps/indicators/nationally-designated-protected-areas/nationally-designated-protected-areas-assessment-3

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Note: **Emerald network** (see also point 3 below) is one of the data sources for this indicator, with the information available for Switzerland, which is currently the only country with adopted Emerald sites (see the chart below: Complementarity between European designations (Natura 2000 and Emerald networks) and national designations by share of terrestrial area).

Chart — Complementarity between European designations (Natura 2000 and Emerald networks) and national designations by share of terrestrial area
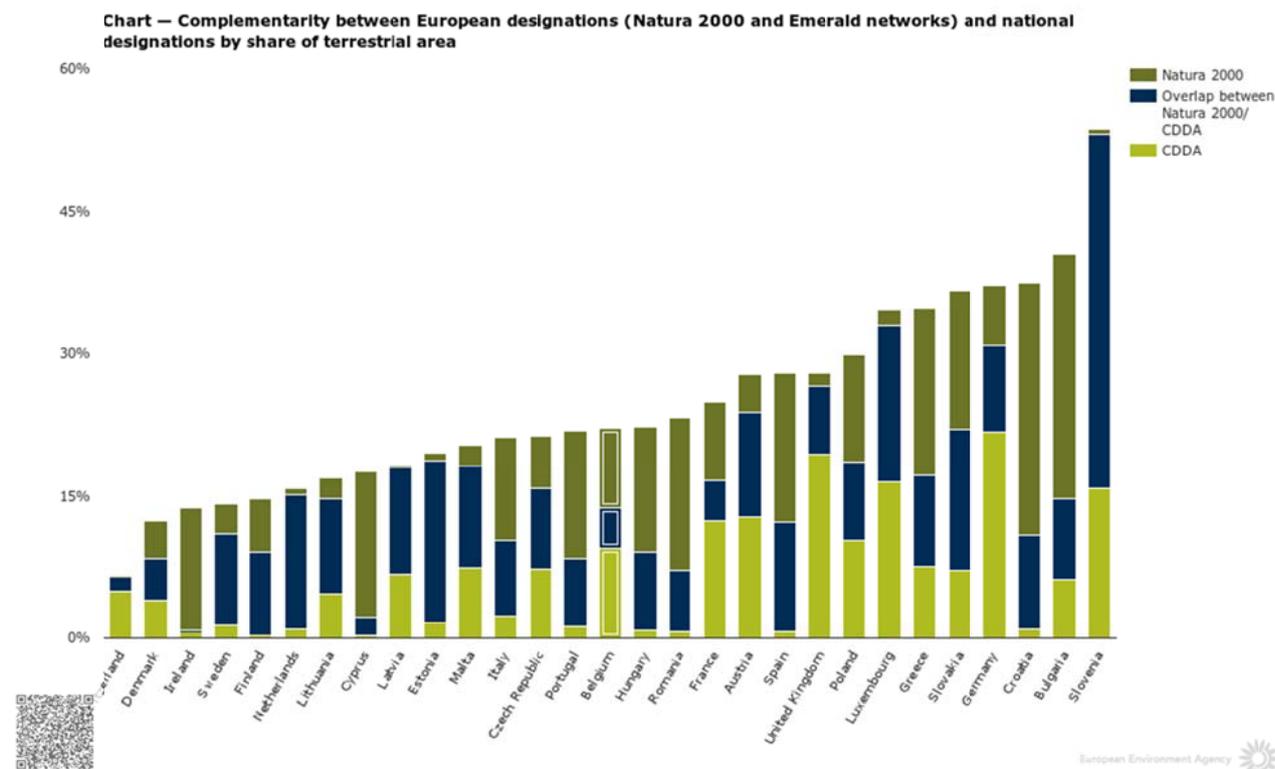
The status may however change very soon as several countries are preparing sites for adoption this year. All ENI East countries are part of the Emerald processes.

In other words, SEBI is a **user** of Emerald data and does not have an active role in the process. However, if new validated data became available for additional countries, SEBI would add them so as to increase the geographical coverage of the indicator.

D2: biosphere reserves and wetlands of international importance
This is not an EEA indicator

D3: Forests and other wooded land
Here the approach could be two-fold, i.e.:

- Information on the coverage of forests and area change for forest and other major ecosystems, as in SEBI 004: http://www.eea.europa.eu/data-and-maps/indicators/ecosystem-coverage-1/assessment-1 Data used in the indicator come from the Corine Land Cover classes.

- Information on sustainable use, e.g. SEBI 017: Forest: growing stock, increment and fellings: http://www.eea.europa.eu/data-and-maps/indicators/forest-growing-stock-increment-and-fellings/forest-growing-stock-increment-and-4 & SEBI 018: Forest: deadwood: http://www.eea.europa.eu/data-and-maps/indicators/forest-deadwood-1/assessment-1 Here information comes from Forest Europe (MCPFE = Ministerial Conference on the Protection of Forests in Europe), where Belarus, Georgia, Moldova and the Ukraine are signatory countries.

D4: threatened and protected species

Here an example could be SEBI 002: Red List Index for European species:
http://www.eea.europa.eu/data-and-maps/indicators/red-list-index-for-european-species/red-list-index-for-european

The indicator was calculated for birds, however, it has not been updated since its publication in the 2010 set, as there was no specific prioritisation from the stakeholders, namely the European Commission as well as some methodological issues with the indicator. In addition, please be aware that the European Red Lists were commissioned by the European Commission and elaborated and compiled by IUCN. They are available from http://www.eea.europa.eu/data-and-maps/data/european-red-lists-4 and some ENI countries and marine areas are covered.

D5: trends in the number and distribution of selected species

Here a good example is SEBI 001: Abundance and distribution of selected species:
http://www.eea.europa.eu/data-and-maps/indicators/abundance-and-distribution-of-selected-species/abundance-and-distribution-of-selected-4

Currently the indicator has two components, birds and grassland butterflies. Armenia and Ukraine have some monitoring schemes for grassland butterflies (NGOs) and the information for these 2 countries is included in the indicator.

D6: invasive alien species

SEBI 010: Invasive alien species in Europe: http://www.eea.europa.eu/data-and-maps/indicators/invasive-alien-species-in-europe/invasive-alien-species-in-europe

This indicator has not been updated since 2010 for various reasons. In 2012, the EEA published a report: **Invasive alien species indicators in Europe - a review of Streamlining European Biodiversity (SEBI) Indicator 10** (Technical Report No 15/2012)
http://www.eea.europa.eu/publications/streamlining-european-biodiversity-indicators-sebi, which provides option for methodology changes as well as new approaches; and this year a paper: Rabitsch, W., Genovesi, P., Scalera, R., Biała, K., Josefsson, M. & Essl, F. (2016). Developing and testing alien species indicators for Europe. Journal for Nature Conservation, 29, pp.89-96.
(http://www.sciencedirect.com/science/article/pii/S1617138115300339)

Two other EEA indicators, which may be of relevance, are related to the Marine Strategy Framework Directive, for 'marine non-indigenous species', as they are called in MSFD:

- MAR 002: Trends in marine non-indigenous species: http://www.eea.europa.eu/data-and-maps/indicators/trends-in-marine-alien-species-mas-2/assessment
- MAR 003: Pathways of introduction of marine non-indigenous species: http://www.eea.europa.eu/data-and-maps/indicators/trends-in-marine-alien-species/assessment

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3. Reporting to the Bern Convention using EEA's/Eionet's reporting infrastructure "Reportnet"

Under the Council of Europe's Bern Convention and the Emerald Network of Areas of Special Conservation Interest, contracting parties submit what is referred to as the 'Emerald' databases using Reportnet, and should include, in due time:

- Their national reference databases on the presence of the species and habitats of European importance (from the lists of Res. 6 (1998) and Res. 4 (1996) of the Bern Convention) in their corresponding national territories, including an estimation of the total population (species) and total habitat area (habitats) at country level, and an indication of their presence within the European biogeographical regions (See http://www.eea.europa.eu/data-and-maps/figures/biogeographical-regions-in-europe-1/);

   o Note: The Emerald network is under construction and currently only sites are being reported and adopted for more and more countries. This reporting will take place for the first time in 2018, and may be a light approach not asking the full set of data envisioned in the Convention.

- Digital distribution maps of proposed or adopted sites. Progress for all countries is steady, with Armenia and Ukraine registering the highest the GIS boundary and the ecological data (according to the Emerald Standard Data Form (SDF)) for each proposed Emerald site. New proposed Emerald sites are selected throughout the year, and their SDFs are completed and included in the new database submitted at the end of the year in Reportnet.

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