



Contributions of Biodiversity Observation Networks (BONs) to GEO targets: EU BON, a European case study

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The role of BONs for GEO, scientific research and global policy reporting

EU BON seeks to enhance biodiversity data availability and integration, and is the European contribution to GEO (Group on Earth Observations) and the wider Global Earth Observation System of Systems (GEOS).

EU BON addresses the existing barriers to improve the biodiversity data landscape. There are a number of roles and contributions of Biodiversity Observation Networks (BONs) towards mobilising biodiversity information for use by policy development and decision-makers (Wetzel *et al.* 2015). At the center of the EU BON's efforts (Hoffmann *et al.* 2014) is the promotion and adoption of existing standards of good practice and integration of data within a single biodiversity portal in order to make it discoverable, accessible and digestible.

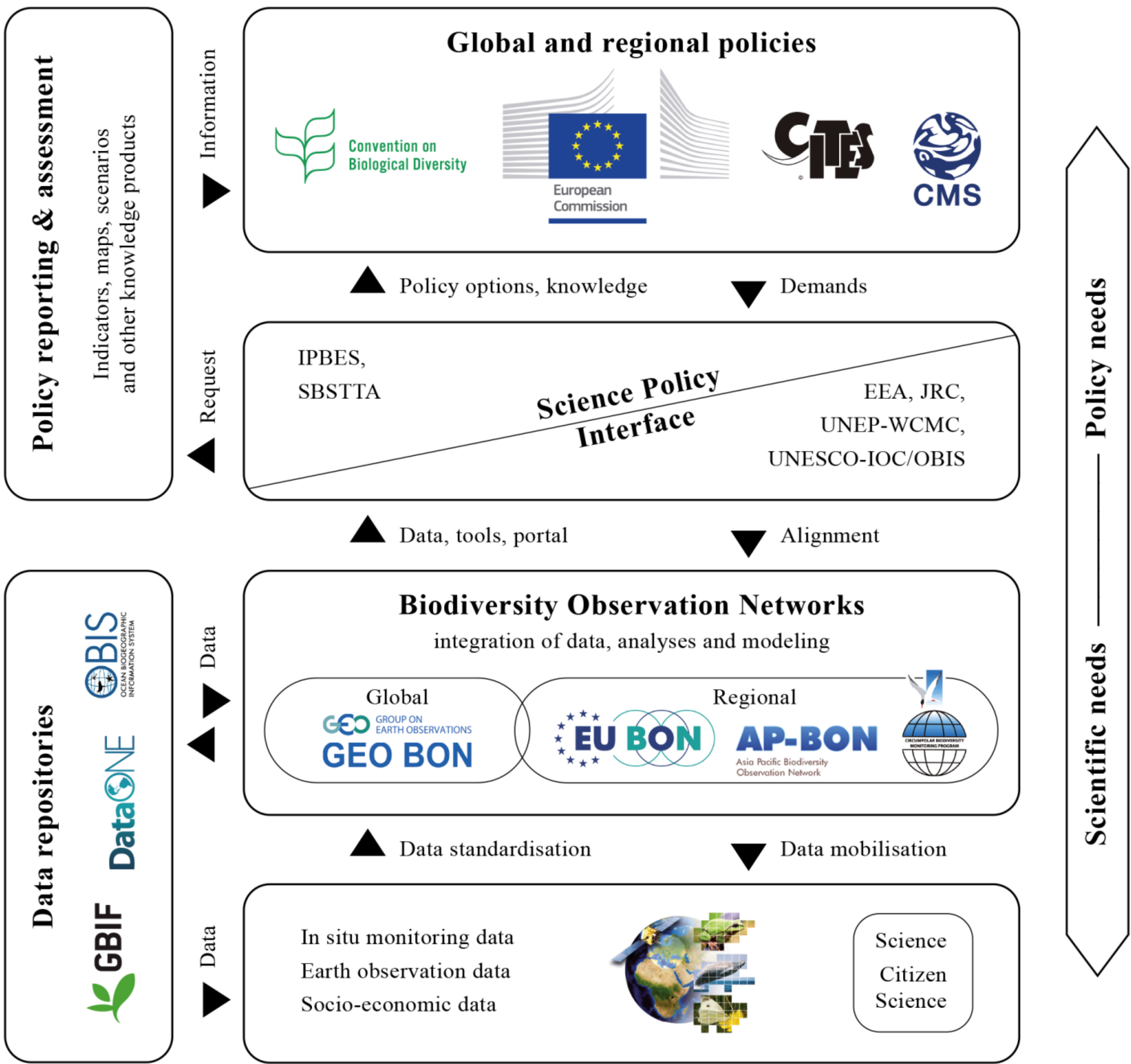


credits: Presentation Barbara J. Ryan, GEO Secretariat,

EU BON supports the work of GEO and in particular GEO BON in several ways. Tools developed in the project will be part of GEO BONs BON-in-a-Box, an online toolkit for national and regional biodiversity observation systems. A prototype data browser was developed by GBIF and EU BON to make existing data discoverable, e.g. species occurrence datasets, and to evaluate species richness and population trends, applying the Essential Biodiversity Variable concept by using real data. The data standard *Darwin Core* was extended for sample-based biodiversity monitoring data to better capture biodiversity monitoring schemes. In case the technological infrastructure is lacking, EU BON also provides tools (*GBIF IPT*, *PlutoF*) for publishing and curating biodiversity data in order to provide open data access. Furthermore, a plethora of tools were developed for analysing and modeling data. In addition to mobilising data and working on new tools and other products, the partners of the consortium contribute to and participate in the working groups of GEO BON, e.g. on terrestrial species monitoring or data interoperability.

EU BON key outcomes:

- Strategies for targeted biodiversity data mobilization in Europe.
- European Biodiversity Portal with new functionalities.
- Software tools & improved models for better biodiversity data recording / mapping and analysis / visualization of patterns & trends.
- Results & lessons learnt from EU BON (& other) sites for regional/global network of long term recording/monitoring sites (LTER / ILTER).
- Recommendations for integrated national / regional biodiversity monitoring schemes and information infrastructures.
- Blueprint for a global biodiversity monitoring scheme / infrastructure (GEO BON).



This figure illustrates how biodiversity data can be mobilised by Biodiversity Observation Networks (BONs), such as the European Biodiversity Observation Network (EU BON), for use in policy implementation. Source: Wetzel *et al.* 2015

EU BON facts:

- EU FP7 collaborative project
- 31 partners (18 countries)
- Coordination: Museum für Naturkunde Berlin
- Project duration: 54 months; 2012-2017
- EC contribution: 9 mio Euro
- Objectives: EU BON delivers: access to biodiversity data, data integration, and analysis that links to international environmental policies

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References:

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