



EU BON in the GEOSS framework

Linkage of EU BON & GEO BON

Christoph Häuser, Anke Hoffmann, Florian T. Wetzel, Johannes Penner, Katrin Vohland

Museum für Naturkunde, Leibniz-Institute for Evolution and Biodiversity Science, Invalidenstraße 43, D-10115 Berlin, Germany

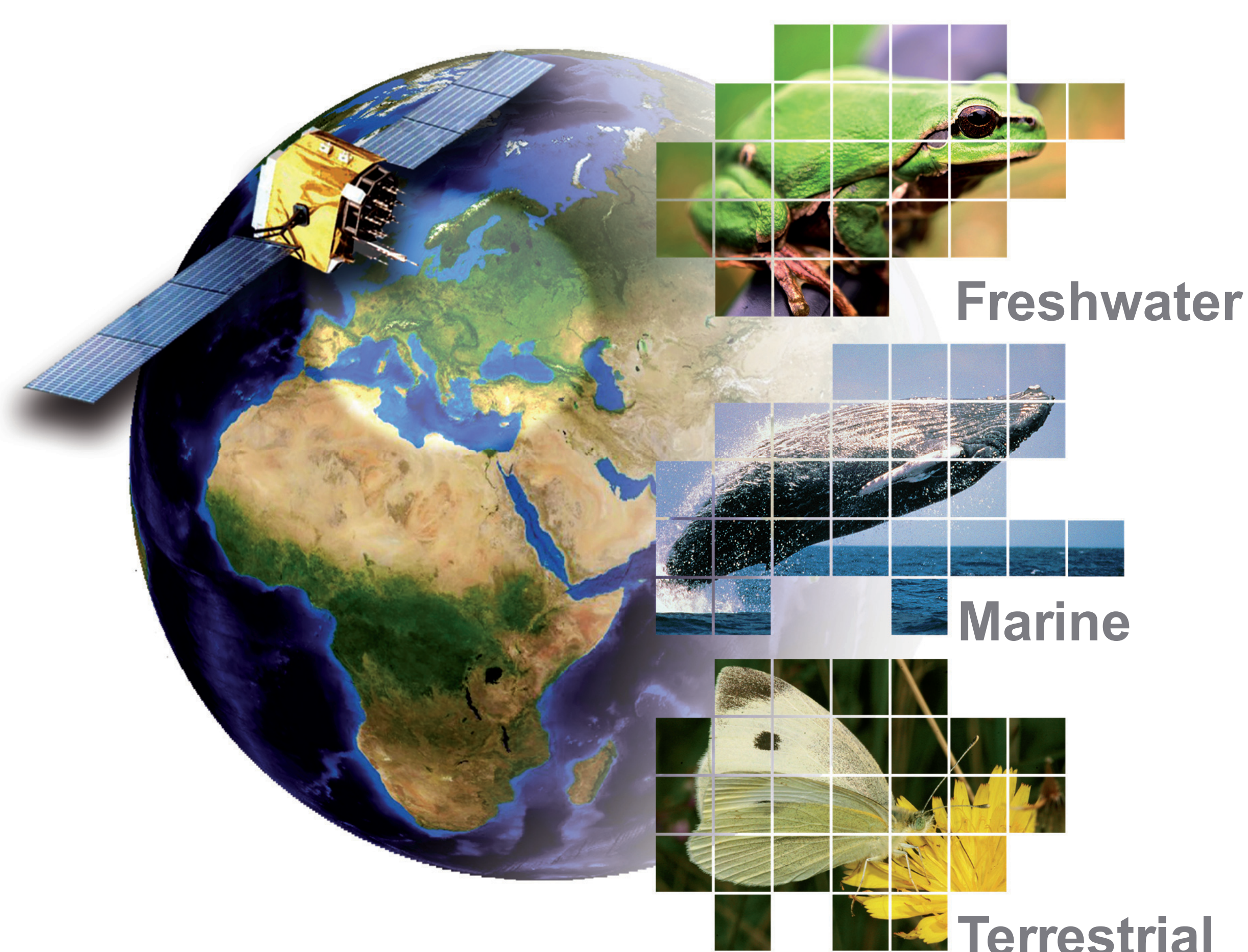
christoph.haeuser@mfn-berlin.de, anke.hoffmann@mfn-berlin.de, florian.wetzel@mfn-berlin.de, johannes.penner@mfn-berlin.de, katrin.vohland@mfn-berlin.de



MAIN OBJECTIVE of EU BON:

build a substantial part of the Group on Earth Observation's Biodiversity Observation Network (GEO BON), also in light of the Intergovernmental science-policy Platform on Biodiversity and Ecosystem Services (IPBES)

- **Key partners in EU BON are directly linked to several GEO BON working groups**
- **EU BON task groups are related to GEO BON activities:** Informatics, Remote Sensing, Essential Biodiversity Variables
- **EU BON delivers:** access to biodiversity data, data integration, and analysis that links to international environmental policies (e.g. CBD, IPBES, EU legislation)
- **EU BON outcomes** presented at GEO XII Plenary



Images: Mihai Tamsila, Wanetta Ayers, Johannes Penner

The EU BON approach

There is an urgent demand to integrate, harmonize and standardize biodiversity information from on-ground to remote sensing data, in order to adequately address questions from decision makers. The global framework is set by the Global Earth Observation System of Systems (GEOSS) and its biodiversity section, the Group on Earth Observations Biodiversity Observation Network (GEO BON). Europe's contribution towards these goals and initiatives is currently **EU BON** (European Biodiversity Observation Network) which builds on existing biodiversity information systems and infrastructures (e.g. GBIF, LifeWatch, DataOne, LTER and national biodiversity data centres) thereby integrating access to multiple data sources.

EU BON is an integration between social networks of science and policy and technological networks, resulting in a new open access platform for sharing biodiversity data and tools as well as results from state of the art analyses. The developed tools are evaluated and refined across terrestrial, marine and freshwater ecosystems. Together with the latest modelling scenarios, a network of test sites is used to verify the observed patterns, processes and trends (Hoffmann et al. 2014).

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 mobilizing biodiversity information for use by policy development and decision-makers (Wetzel et al. 2015). At the center of the EU BON's efforts is promoting and adopting existing standards of good practice and integrating data within a single biodiversity portal in order to make it discoverable, accessible and digestible.

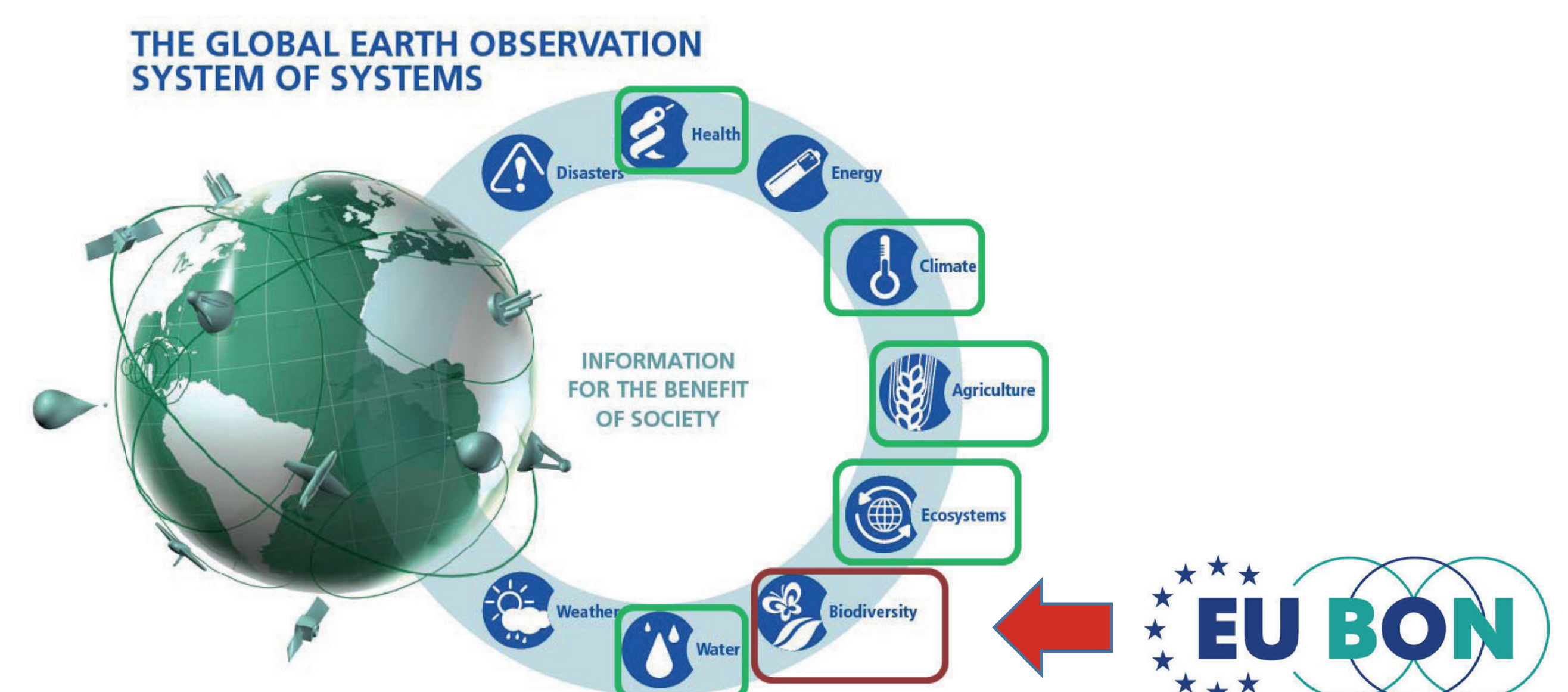
museum für
naturkunde
berlin



www.eubon.eu

This project has received funding from the European Union's Seventh Programme for research, technological development and demonstration under grant agreement No 308454

GEO GROUP ON
EARTH OBSERVATIONS



EU BON task forces address GEO BON needs:

Informatics Task Force: has the purpose to advise the EU BON project on connecting with GEOSS Common Infrastructure (GCI), other global biodiversity and ecosystem cyber-infrastructures, and relevant ICT standards and trends.

Remote Sensing Task Force: acts as a service provider/central point for all EU BON questions related to remote sensing and also acts as an integration point between the local level (test sites) and the global/European wide level, especially concerning analysis and modeling results.

Essential Biodiversity Variable (EBV) Task Force: focuses on how EU BON can contribute to the development of the EBVs (use cases, EBV data standards, work flows). An EU BON publication describes how EBVs could bridge the gap between biodiversity data and policy reporting (Geijzendorffer et al. 2015).

References:

- Geijzendorffer, I.R., E.C. Regan, H.M. Pereira, L. Brotons, N. Brummitt, Y. Gavish, P. Haase, C.S. Martin, J.-B. Mihoub, C. Secades, D.S. Schmeller, S. Stoll, F.T. Wetzel & M. Walters. 2015. Bridging the gap between biodiversity data and policy reporting needs: An Essential Biodiversity Variables perspective. *Journal of Applied Ecology*. doi: 10.1111/1365-2664.12417.
- Hoffmann, A., J. Penner, K. Vohland, W. Cramer, R. Doubleday, K. Henle, U. Köjalg, I. Kühn, W.E. Kunin, J.J. Negro, L. Penev, C. Rodríguez, H. Saarenmaa, D.S. Schmeller, P. Stoev, W.J. Sutherland, E. O Tuama, F.T. Wetzel & C.L. Häuser. 2014. The need for an integrated biodiversity policy support process – Building the European contribution to a global Biodiversity Observation Network (EU BON). *Nature Conservation* 6: 49-65. doi: 10.3897/natureconservation.6.6498.
- Wetzel, F.T., H. Saarenmaa, E. Regan, C.S. Martin, P. Mergen, L. Smirnova, É. Ó Tuama, F.A. García Camacho, A. Hoffmann, K. Vohland & C.L. Häuser. 2015. The roles and contributions of Biodiversity Observation Networks (BONs) in better tracking progress to 2020 biodiversity targets: a European case study. *Biodiversity*. doi: 10.1080/1488386.2015.1075902.