



## How can we measure and calculate Essential Biodiversity Variables (EBVs) on a global scale?

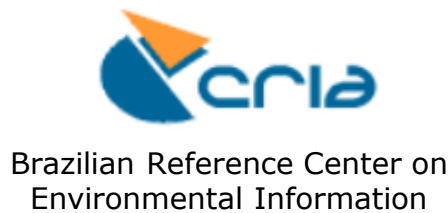
- Which variables are most meaningful?
- Which data are needed and available?
- How can EBVs be calculated?
- What are relevant spatial, temporal and topical scales?
- How sensitive are EBVs to variations in underlying data?
- How can scientists and research infrastructure operators cooperate globally to serve and process the essential large datasets?
- How can standards, protocols and workflows be developed and integrated?
- How can existing biodiversity research infrastructures be made interoperable?

# GLOBIS-B project

- EU-funded project supported by the Horizon 2020 research and innovation framework program of the European Commission
- Collaboration and support action
- Duration: 36 months
- Coordinator:  
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# 12 supporting research infrastructures



# GLOBIS-B project partners



## **University of Amsterdam, NL**

Institute for Biodiversity and Ecosystem Dynamics (IBED)  
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## **Cardiff University, UK**

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## **Gnúbila, France**

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## Aims & objectives

- Identify the research needs and infrastructure services underpinning the concept of EBVs
- Make an infrastructure development agenda for computing EBVs globally
- Identify the required primary data, analysis tools, methodologies, and legal and technical bottlenecks
- Bring key scientists together with global research infrastructure operators and legal interoperability experts
- Facilitate the multi-lateral cooperation of global research infrastructures

## Focus on three EBV classes

Species populations  
(distributions)



Species traits



(Community  
composition (species  
interactions))

## Joint efforts of infrastructures

Support data  
discovery ( various  
spatial/temporal  
scales)

Integrate data from  
different origins

Support workflows,  
computation and  
visualization

## Research opportunities

Develop scientific  
models

Test for repeatability  
and robustness (effect  
of data and parameter  
change)

Design decision  
support tools

# Work Plan

## Workshops

1	2	3	4
Feb 2016	June 2016	March 2017	Feb 2018

## Workshop topics

Species Populations (distribution and abundance)	Species Traits	Species Interactions
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## Participants

### World-class biodiversity scientists (15-20)

- Selected based on scientific qualifications and achievements
- From different domains (land, freshwater, marine)
- Covering different taxa (vertebrates, plants, invertebrates)

### Biodiversity research infrastructure operators (15-20)

- From supporting research infrastructures
- With technical and IT background

### Legal (interoperability) experts

- With connection to global policy bodies  
(GEOSS, CBD, IPBES, and European EEA policy and executive bodies)



## Main outcomes

- Design of an integrated research agenda for enhancing multi-lateral cooperation of global research infrastructures to support frontier research on EBVs
- Recommendations and guidelines for the standardization of EBV-relevant data collection and curation and for the sharing of interoperable datasets
- Suggestions for legal implications with respect to licensing, intellectual property rights (IPR), and sharing of resources
- Scientific publication(s), reports & position paper(s)



## How can we cooperate?

- EU BON expert(s) invited for GLOBIS-B workshops.
- Sort out how each project's work can best benefit the other ones.
- Clearly report and disseminate how we together contribute to GEO BON.
- At short term: identify which
  - domains (marine, terrestrial, ...),
  - areas (continents, regions),
  - taxacan be best selected as GLOBIS-B focus in the 4 workshops.