



# Biodiversity Data Workflow and Stakeholder Needs

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# Data Workflow

**Data / Infrastructure**

**Analysis – incl.  
Visualisation**

**Framework**

**Data  
Availability**

**Analysis for reporting**

**EBVs**

**Data  
storage**

**Analysis for  
research**

**Guidelines /  
protocols**

**Discoverability /  
accessability**

**Analysis  
for sites**

**Standards**

**Data needed ?**

**Tools needed ?**

**Guidelines ?**

**Infrastructure ?**

**GEO BON**

**LTER  
Europe**

**EU BON**

**EQP**

**GBIF**

**DataONE**



## Big bio data – New workflows needed



MfN research vessel Valdivia  
1898 picture: MfN



20/11/2015 10:00 am



Merida, Spain

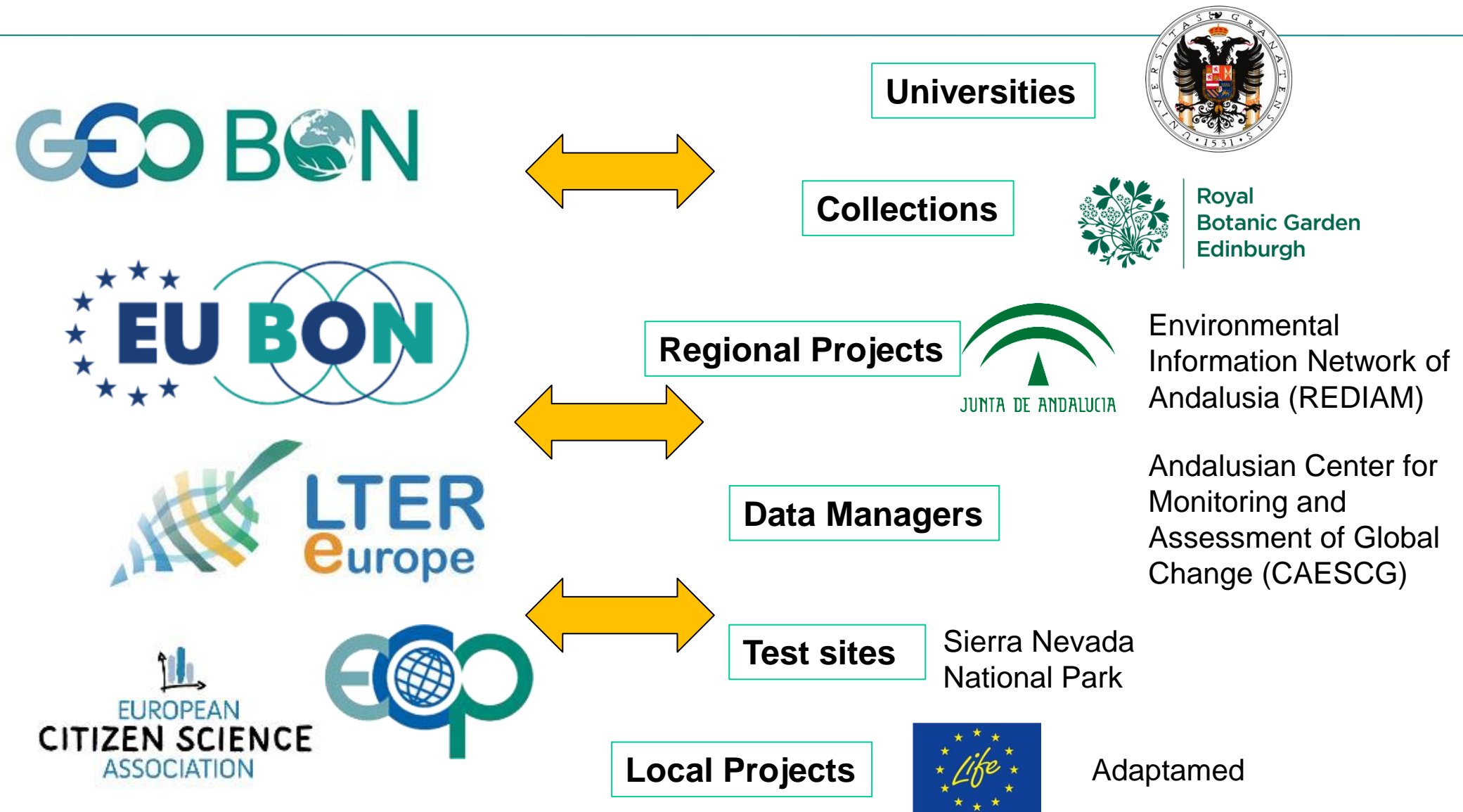
Sentinel-2 Satellit

picture: ESA





# Networks and stakeholder



# Online survey

## 3rd EU BON Stakeholder Round Table "Biodiversity data workflow - from data mobilisation to practice"

10./11. December 2015 Granada, Spain

Dear participants,

One main objective of the round table is to understand how the workflow from data mobilisation to decision making functions in practice, including within the context of EU BON. Firstly, we want to evaluate what kind of (biodiversity) data are available and what workflows and best practices already exist. Secondly, we want to assess which gaps still exist and what will be needed to improve the current situation to overcome existing barriers.

In order to prepare the event as best as possible, we would like to ask you some questions in advance and to register on this webpage.

**Please register here for participation. Fields marked with a red asterisk ("\*") are obligatory** (see also last two fields at the bottom of the page). For accommodation please contact Pepa Rodríguez (contact details see agenda).

The questions 1-11 are voluntary but answering them would help us to prepare the roundtable.

Thanks for participating!

Name \*

Institution \*

Email \*

Your background \*

e.g. local manager, biodiversity data, research, modelling, policy

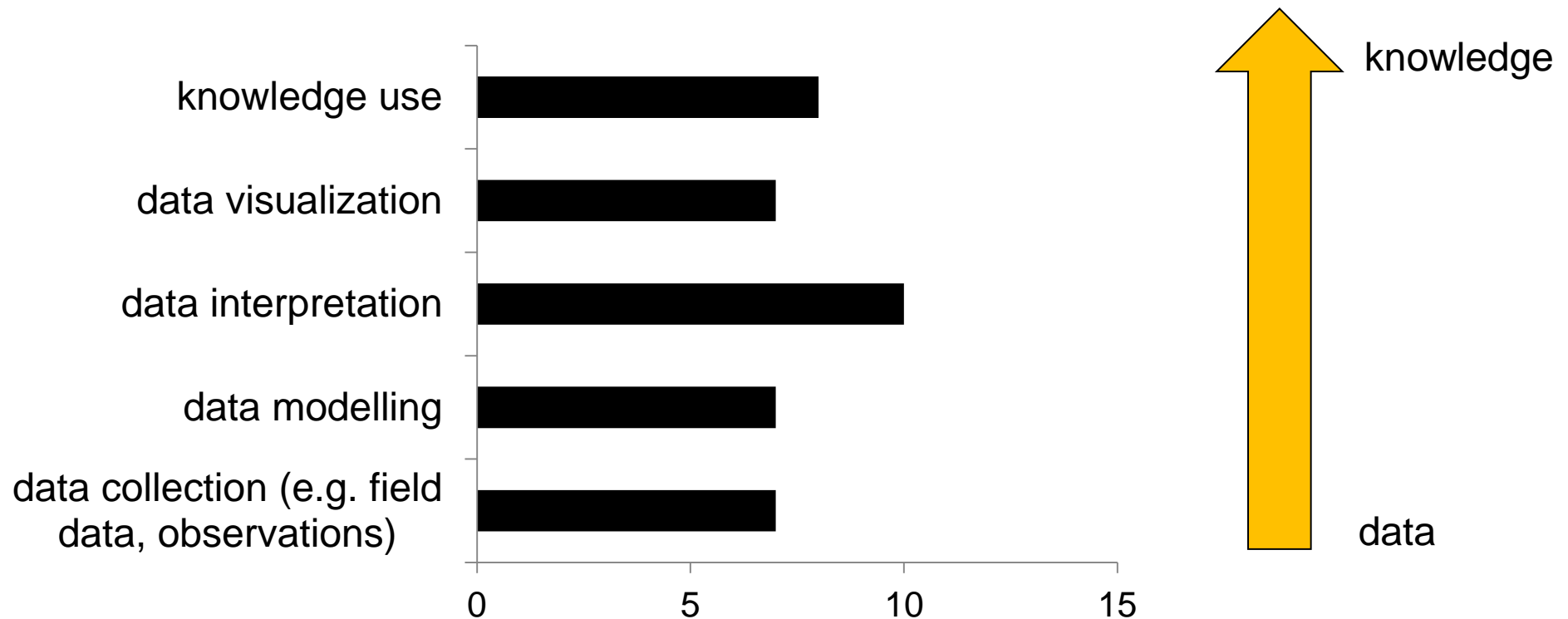
Participation \*

	Yes	No
Roundtable, December 10th	<input type="radio"/>	<input type="radio"/>
Roundtable, December 11th (morning session)	<input type="radio"/>	<input type="radio"/>
Excursion, December 11th (afternoon)	<input type="radio"/>	<input type="radio"/>

- For the participants of the Roundtable
- Around 20 partners participated
- Determine data that is mobilized, tools that are used
- Existing barriers and gaps in data mobilisation



## Position in the biodiversity data chain

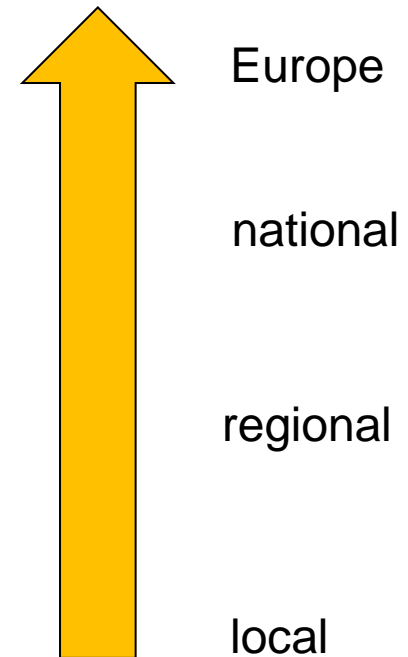


**N = 20 participants**

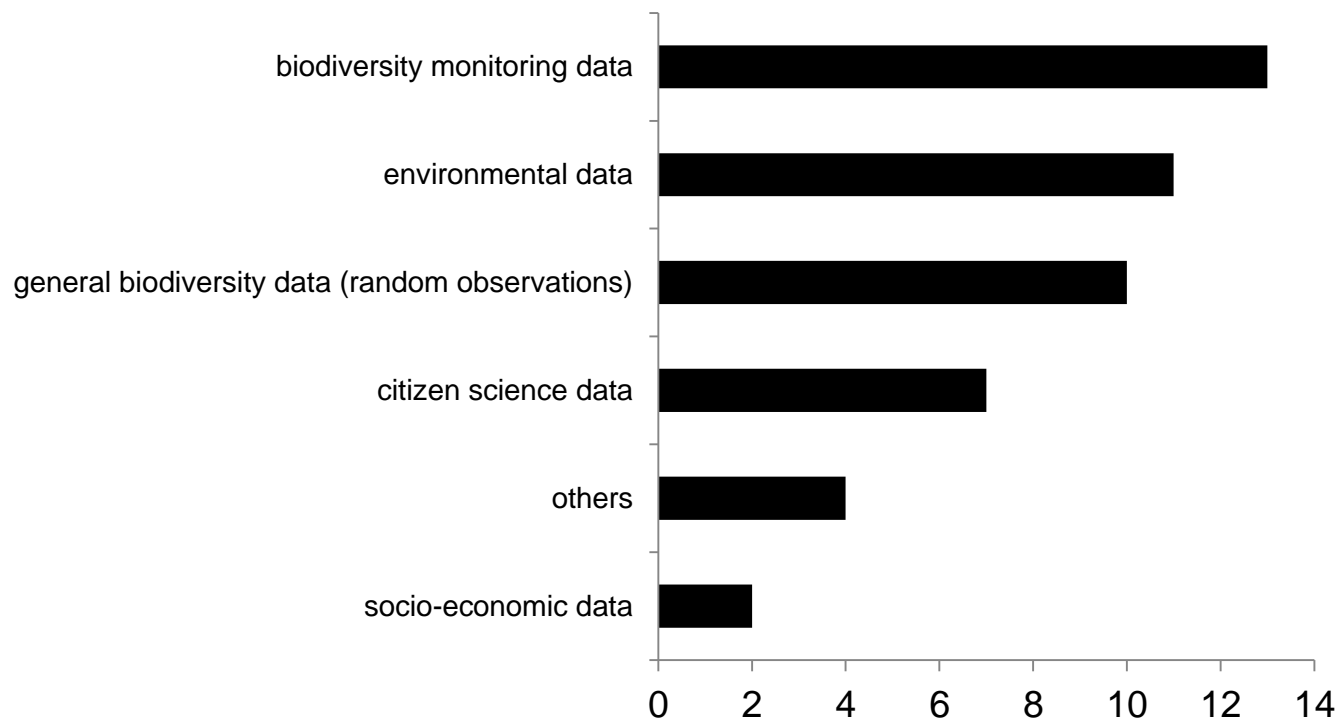


## Roles and position in the biodiversity data chain

- relevance and use of data in environmental policy (e.g. IEEP)
- portal for metadata (e.g. ECOSCOPE)
- making the Environmental Information of Andalusia accessible to the public (e.g. REDIAM)
- mobilizing citizen science biodiversity data (e.g. UTARTU)



# 1. What kind of data do you provide?



picture: MfN



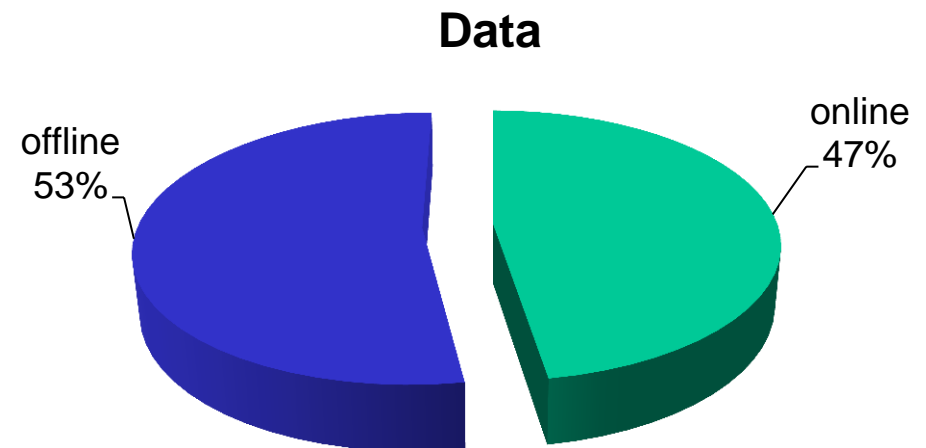
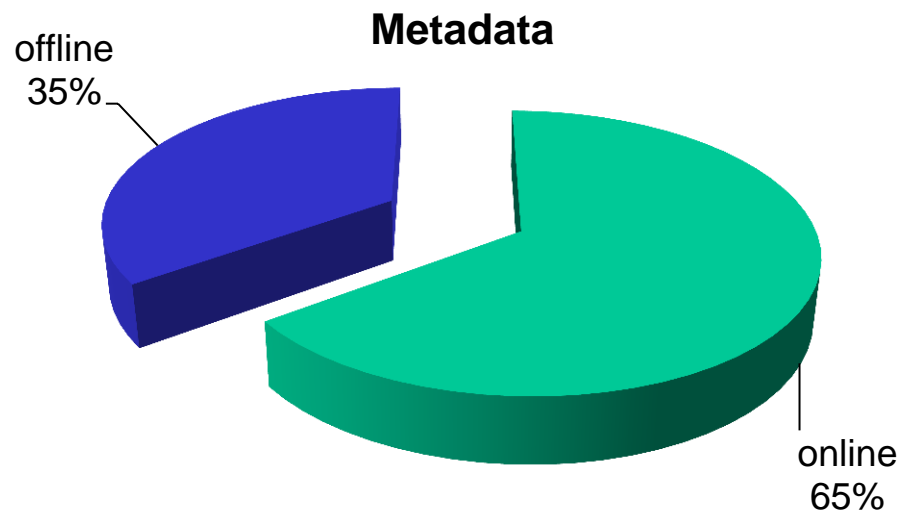
Bild: Alexander Wetzel

- Mostly biodiversity monitoring data - but also random observations.
- Around 1/3 also citizen science data (e.g. UFZ, CSIC, BGardenM, CAESCG, UTARTU).
- 10% socio-economic data (e.g. Rhine-Main, CAESG).





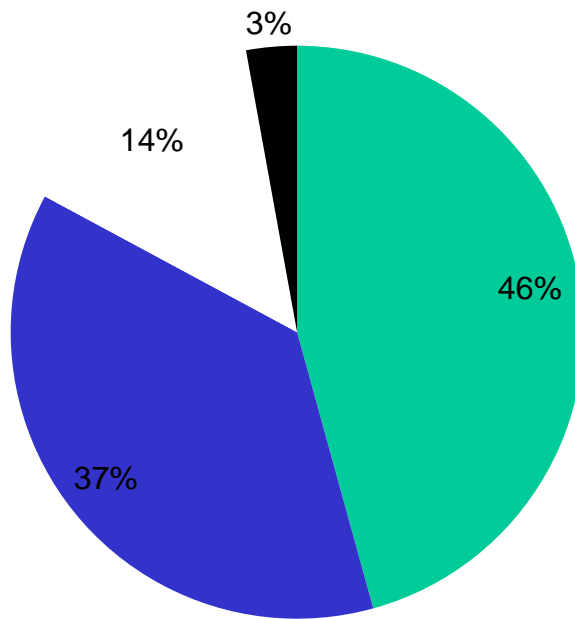
## 2. Where are the metadata and data stored?



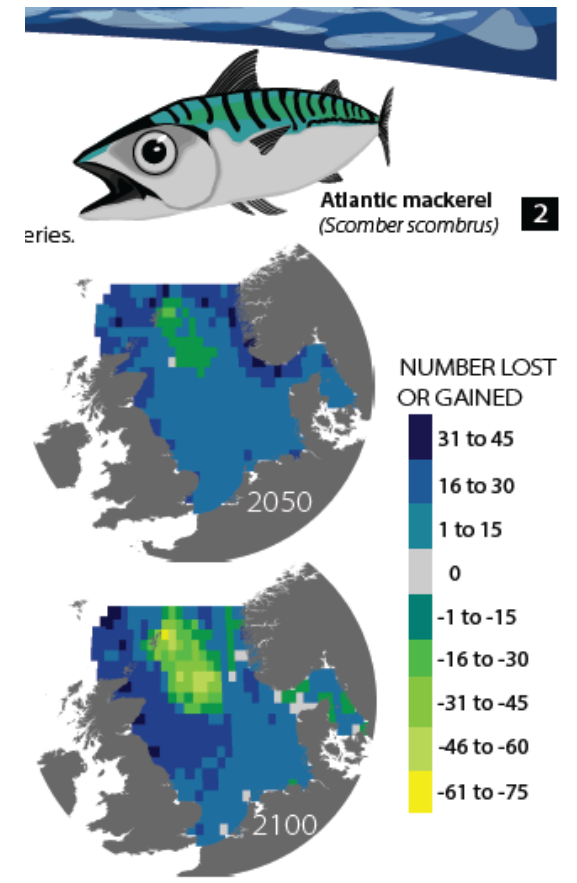
**Metadata better available than the data – and the data availability?**

### 3. How do you visualize the data?

■ maps (spatially) ■ charts / tables ■ printouts (offline) ■ others



Adequate data visualisation tools available (license etc) and human resources?

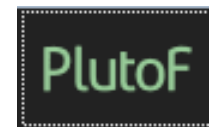


Map: Lauren Weatherdon, UNEP-WCMC



## 4. What tools do you use to interpret the data?

- GIS and statistical software (SAS, R) - CSIC, Rhine-Main, UNEP-WCMC, MRAC, Botanical Garden Meise, Universidad de Granada, CSIC, CAESCG
- Databases (Access) - UNEP-WCMC
- ENVI software - CSIC
- Online tools - UTARTU
- PlutoF workbench tools - UTARTU
- Kibana (Linked to ElasticSearch) - Ecoscope
- Primary data provider – Botanical Garden Edinburgh



→ Mixture of open source, commercial and online tools.  
→ Most collect and analyse data.



## 5. What is the main purpose to use the data for?

- **Research:** 6 times
- **Research and other purposes** (reporting, conservation, management: 10 times
  - national biodiversity status monitoring
  - public administration: management evaluation
  - citizen science community
  - EU environmental policy (biodiversity, water, marine, etc)
  - occasionally tourists, artists
  - education: students
  - decision makers





## 6. What are the gaps?



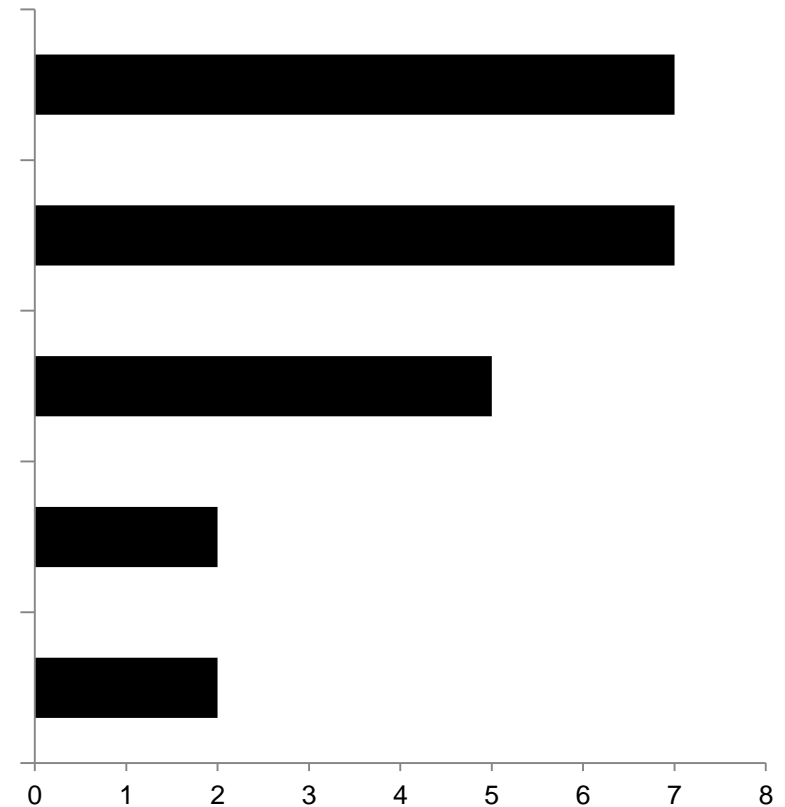
lack of additional environmental/  
socio-political data

data (temporal, spatial,  
taxonomical)

knowledge of policy needs

analysis

tools



Ville Miettinen, Helsinki, Finland  
CC-BY 2.0



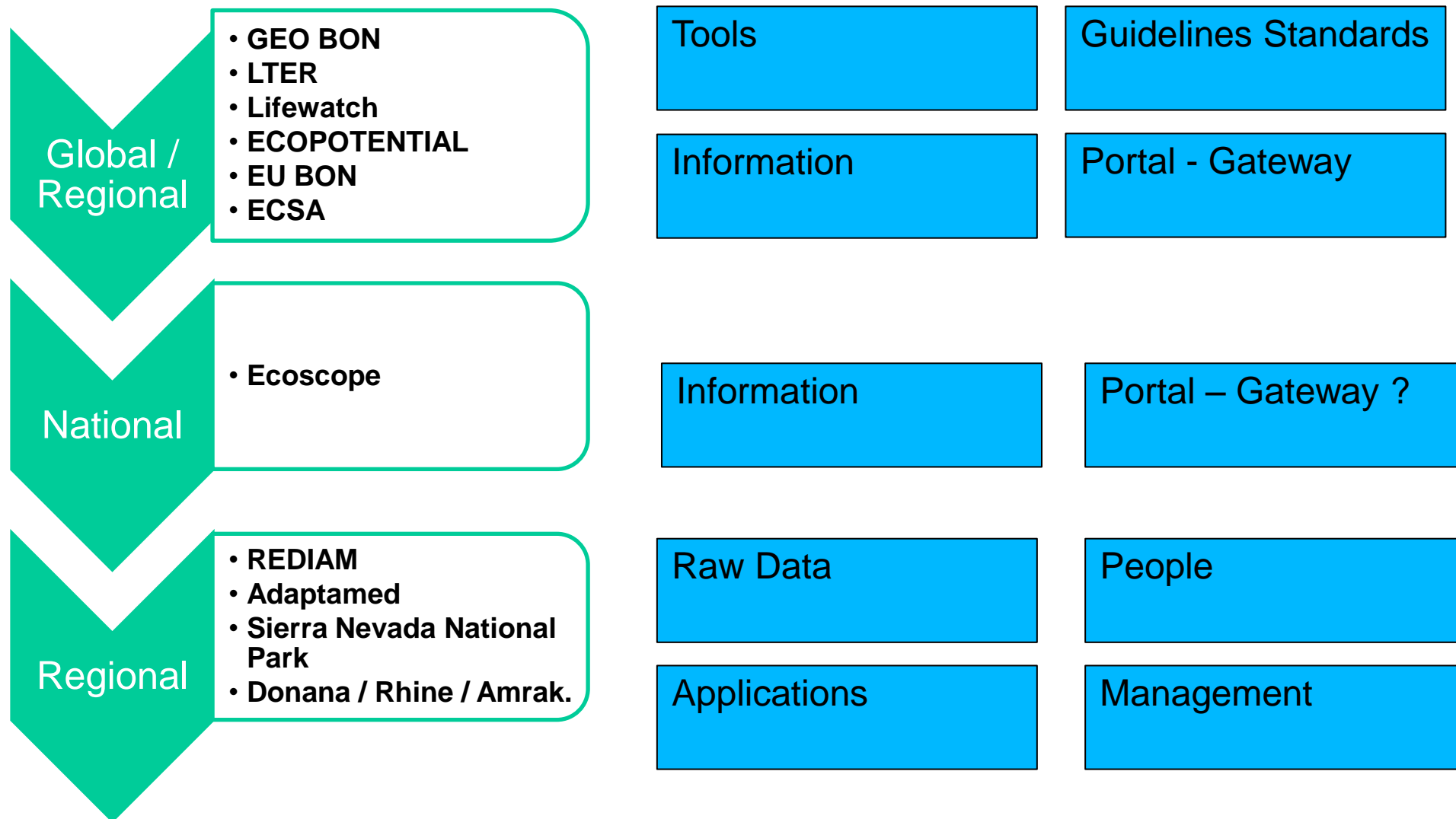
Thank you very much for your attention

+ *participating in the survey !*

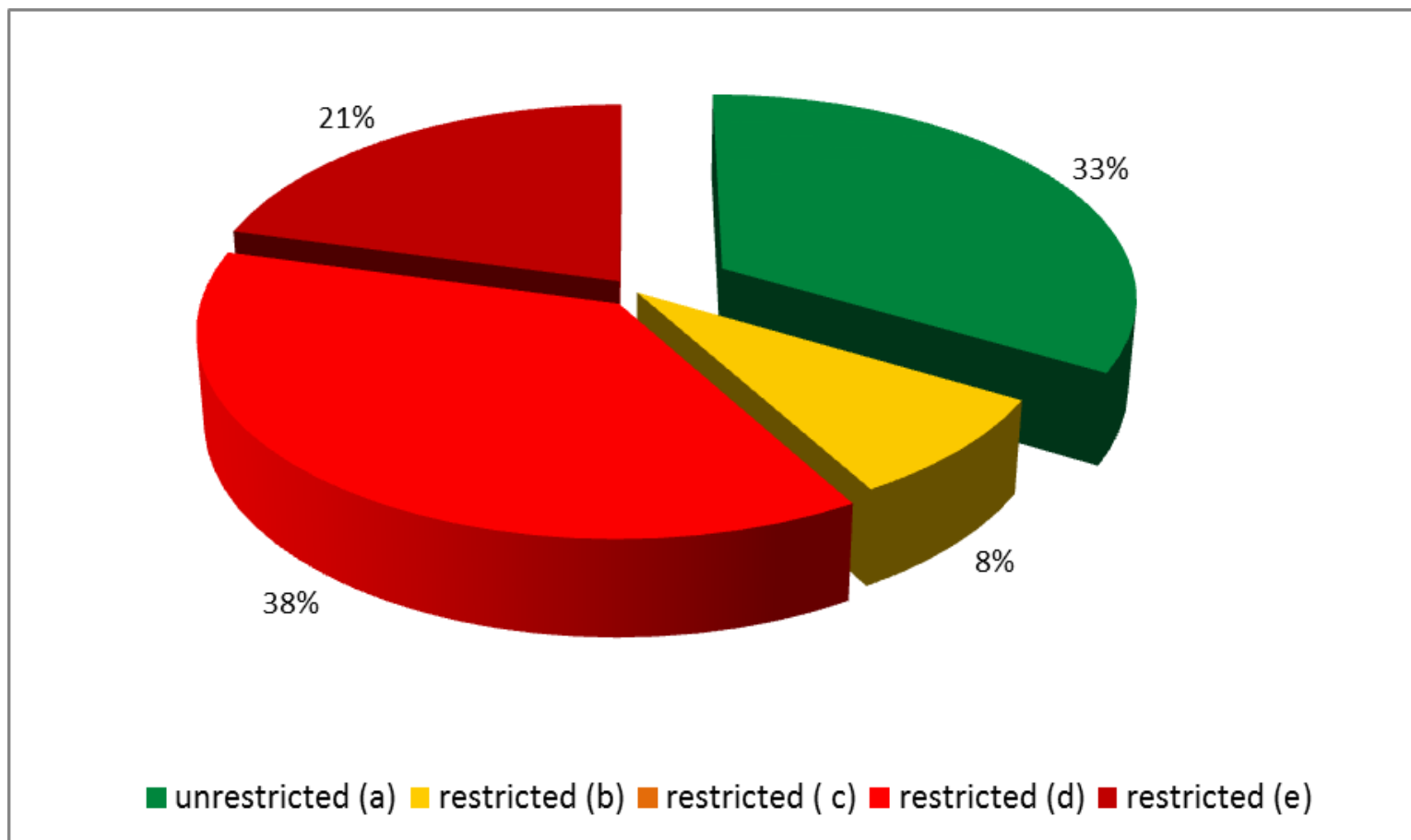
[www.eubon.eu](http://www.eubon.eu)



# BARRIERS in the data workflow



## Data Sources - availability



Deliverable D1.1 Wetzel et al.

20 main biodiversity online data provider/sources





## 6. Who else uses the data and for what purpose?

### **Citizens (4x)**

- visitors of our website, occasionally indeed tourists, artists, other scientists and decision makers
- citizens and students
- broader public
- birders use the database to indentify attraction points

### **Reporting and Management (3x)**

- public administration: reporting and management evaluation
- for conservation; national mapping schemes;
- park managers

### **Research (1x)**

- Scientists of our Institute