EMPOWERING BIODIVERSITY RESEARCH
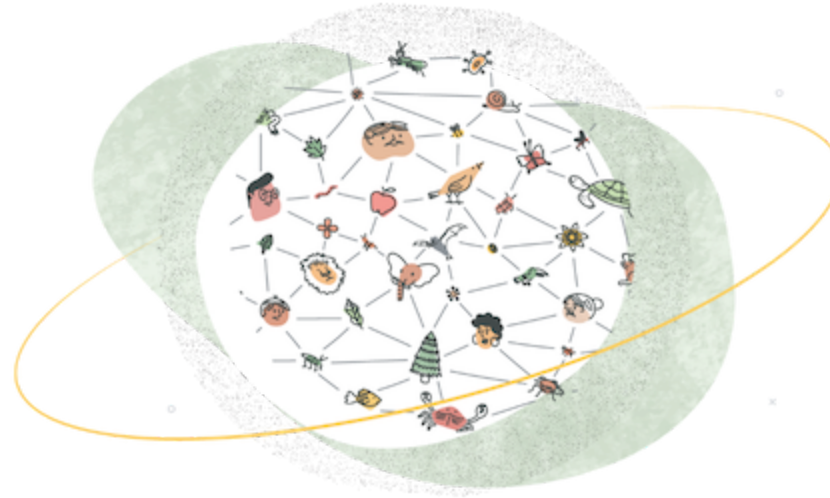
GBIF

Large Projects - looking forward
André Heughebaert, BBPf, 24-25 May 2022

SUMMARY

- Where are we now?
    - About GBIF
    - About Belgium
- Challenges ahead
- Forward looking
    - Global
    - Local

ABOUT GBIF

GBIF.org, assessed on 16 May 2022

|			
2,167,543,437	69,263	1,831	7,196
Occurrence records	Datasets	Publishing institutions	Peer-reviewed papers using data

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ABOUT GBIF

Infrastructure distributed amongst
the **Secretratiat**, the Regions and the **Nodes**.

GBIF.org website + webservices
Integrated Publishing Toolkit
DarwinCore & ABCD standards

Community of people
Governance (voting participants)
Partnership

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HOSTED PORTALS
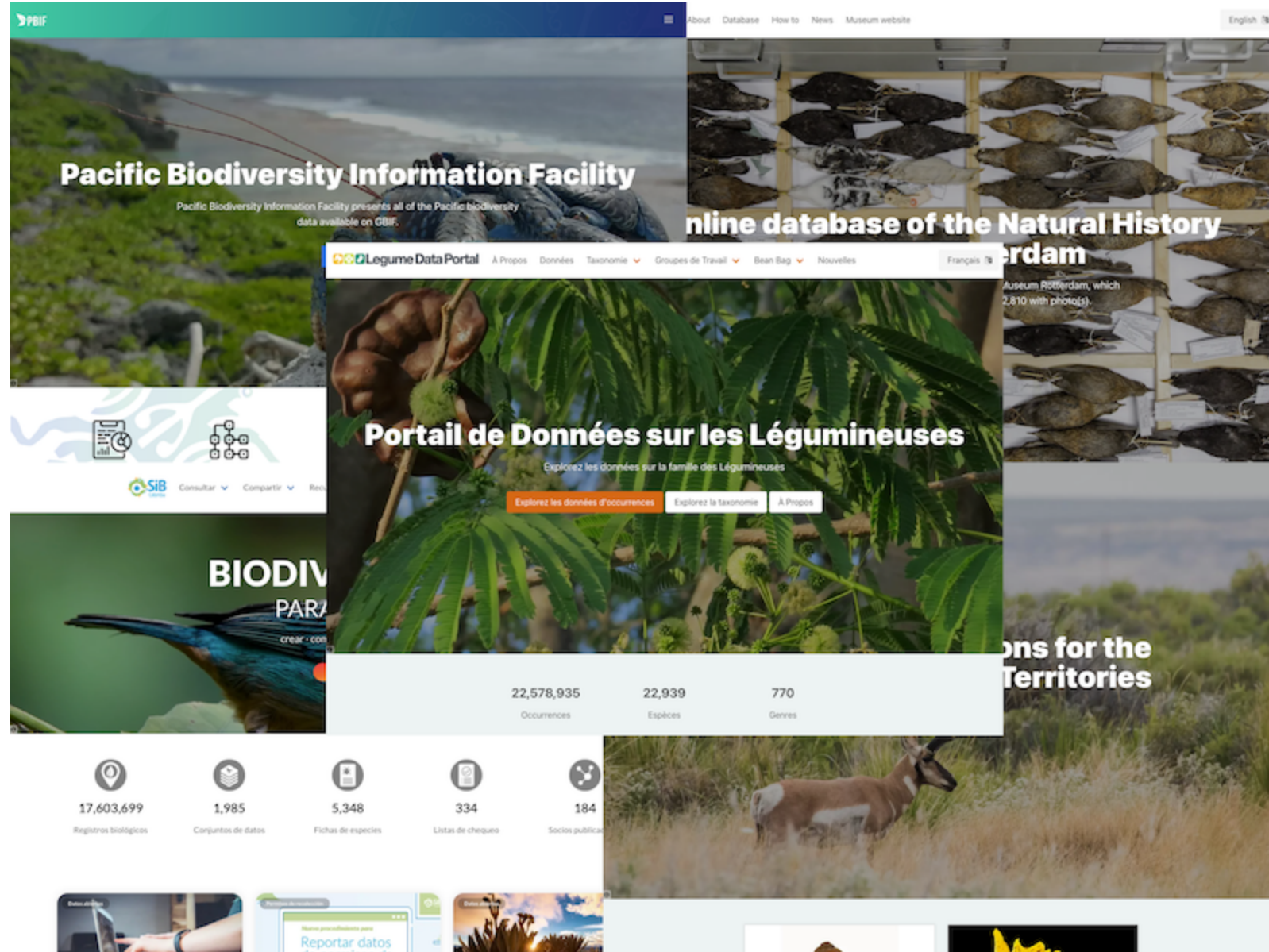
STRATEGIC FRAMEWORK 2023-2027

GBIF vision, mission and values

STRATEGIC PRIORITY AREAS

1. Building the **evidence to advance scientific research** and understanding of global biodiversity
2. Supporting **policy responses and knowledge transfer** that address **urgent societal challenges** around planetary change
3. **Enabling the network** to meet future needs and challenges
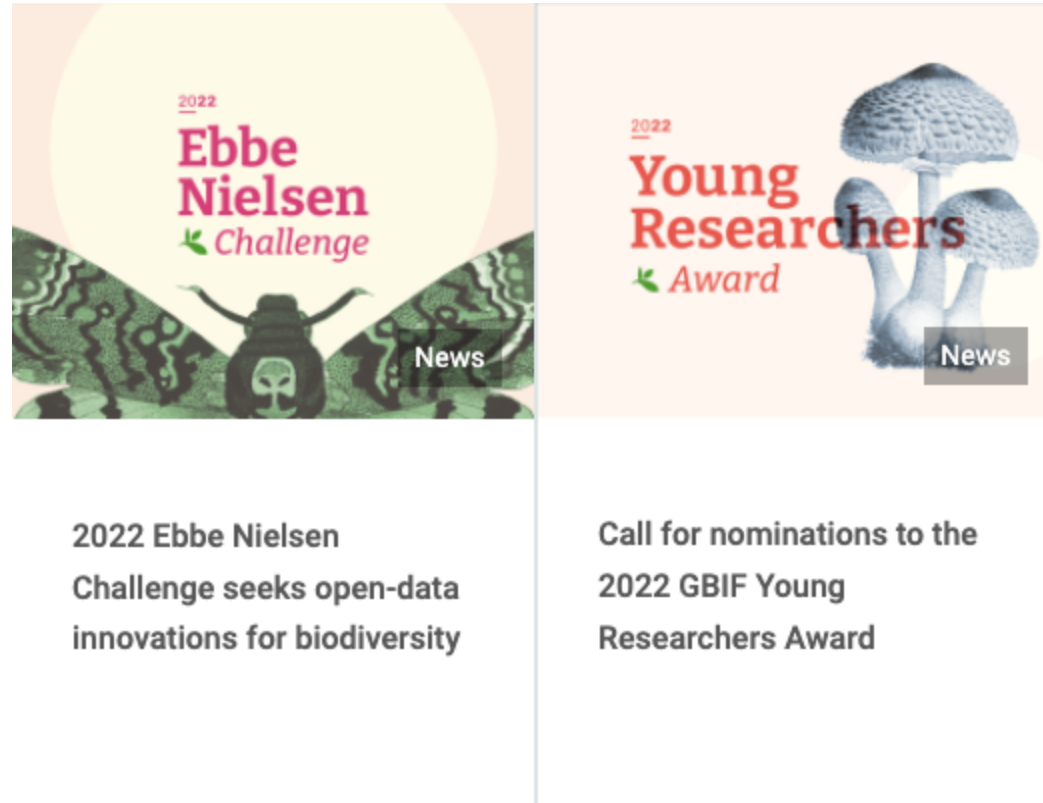4. **Driving innovation** to advance biodiversity-related knowledge

DATA PUBLICATION GUIDELINES

Best Practices in Publishing **Species Checklists**
Best Practices in Publishing **Sampling-event** data
Best Practices in Publishing Occurrence data
GBIF **Metadata** Profile – How-to Guide
Best Practices for **Generalizing Sensitive Species**
Occurrence Data
Georeferencing Best Practices

Integrated Publishing Toolkit(IPT) User Manual
Data Validator and many other tools

GBIF OPEN CALLS

2022 Ebbe Nielsen Challenge seeks open-data innovations for biodiversity
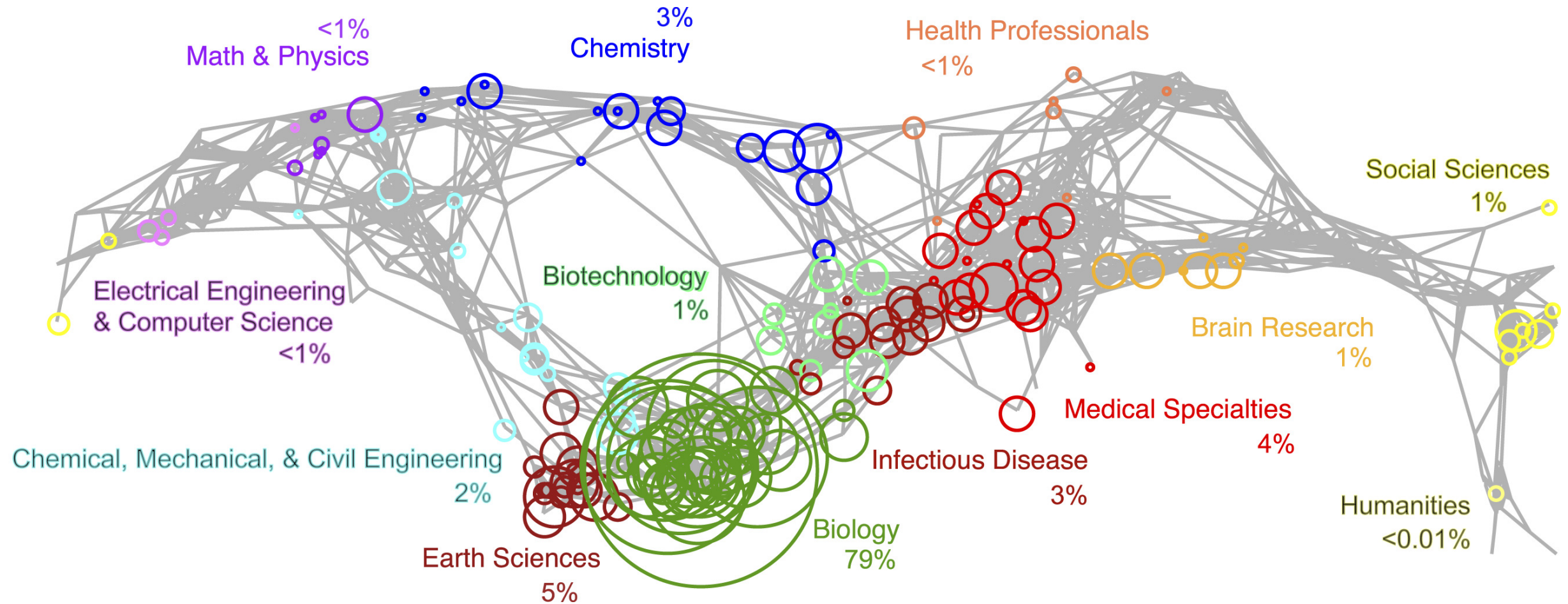
Call for nominations to the 2022 GBIF Young Researchers Award

Don't miss the deadlines...

- 14 August 2022 - Ebbe Nielsen Challenge
- 20 June 2022 - Young Researchers Award

DATA INTEGRATION ENABLES GLOBAL BIODIVERSITY SYNTHESIS.

Heberling JM, Miller JT, Noesgaard D, Weingart SB and Schigel D (2021) Data integration enables global biodiversity synthesis. Proceedings of the National Academy of Sciences. Proceedings of the National Academy of Sciences 118(6): e2018093118.
Available at: https://doi.org/10.1073/pnas.2018093118.

Belgium 🇧🇪

A GBIF Voting participant from Europe and Central Asia
Names of countries and areas are based on the ISO 3166-1 standard

DATA PUBLISHING   **PARTICIPATION**   ALIEN SPECIES∞   MORE...

Member status: Voting
GBIF participant since: 2001
GBIF region: Europe and Central Asia
Head of delegation: André Heughebaert

Node name: Belgian Biodiversity Platform
Node established: 2001
Website: http://www.biodiversity.be
Participant node manager: Dimitri Brosens

NEWSLETTER SIGNUP

GBIF.org, assessed on 16 May 2022

43,518,929
Occurrence records

422
Datasets

23
Publishing institutions

570
Peer-reviewed papers
using data

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BELGIAN BIODIVERSITY PLATFORM

- Belgian node is active since 2001
- publishing **checklists** and **samples** since 2015
- DNA-derived data project with 4 other nodes
- partner in **TrIAS** and **RiparIAS** projects
- **GRSciColl** cleanup and maintenance
- Publishing data to **Catalogue of Life**
- Dedicated portals eg Lepidoptera of Belgium

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CHALLENGES AHEAD

Non-Linnean names 🍄

DwC-A **star schema** limitations 📦

Easier publishing process 📰
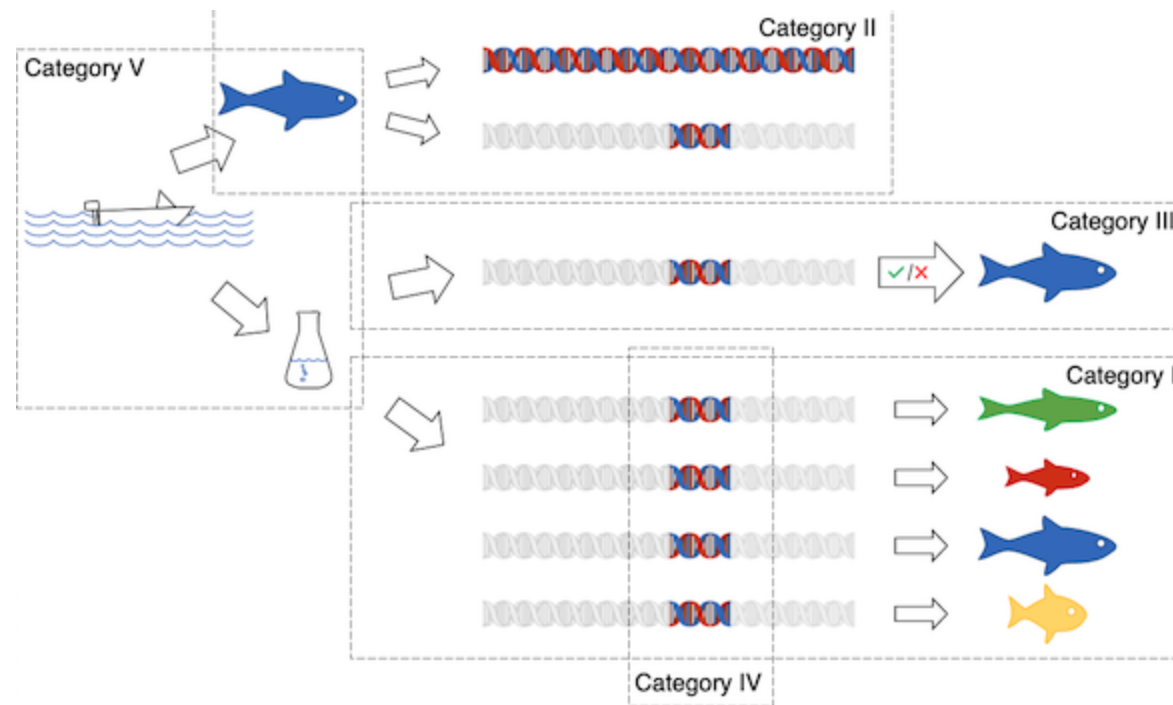
No more **birds**, please! 🦤

Redefine participation ∈ ∉

BEYOND LINNEAN NAMES

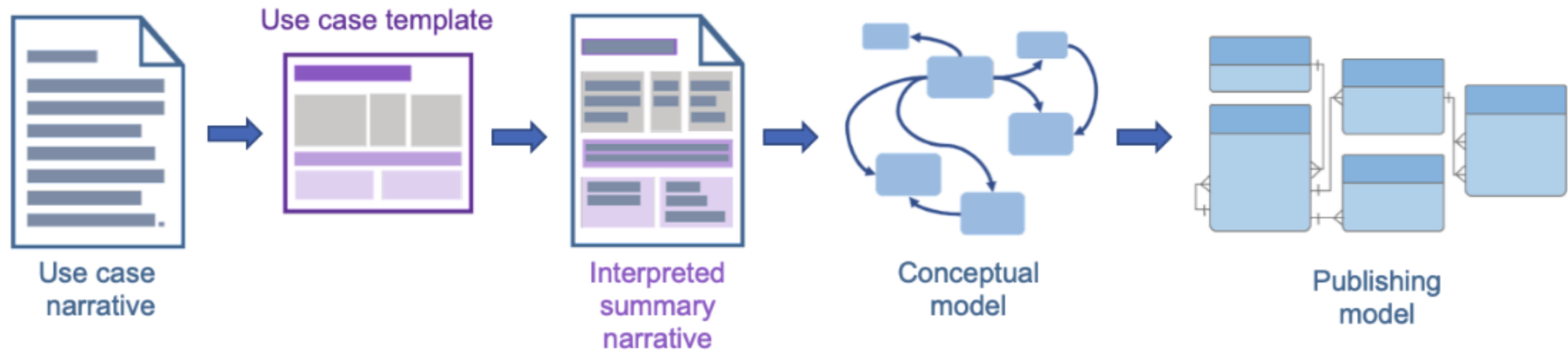## Publishing DNA-derived data

DIVERSIFYING THE DATA MODEL

Community webinar on 12 April 2022
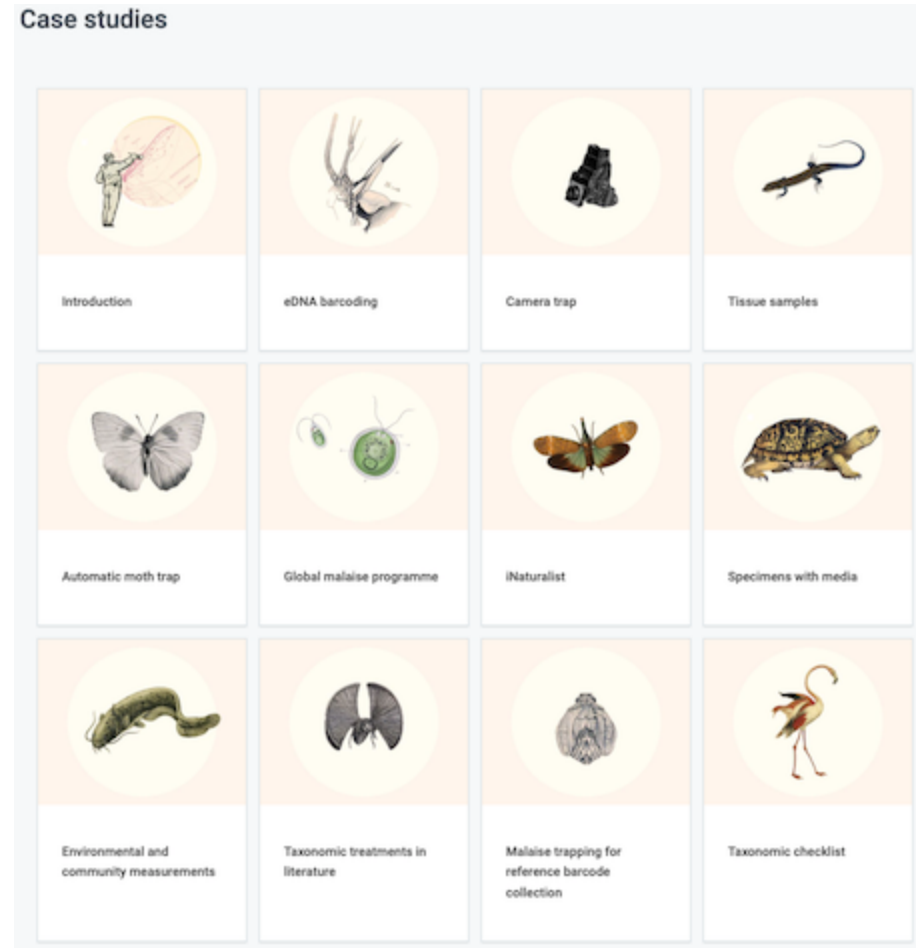by John Wieczorek and Tim Robertson.

THE PROCESS

Diversifying the data model

Use case narrative → Use case template → Interpreted summary narrative → Conceptual model → Publishing model

From use cases to conceptual and publishing models

USE CASES

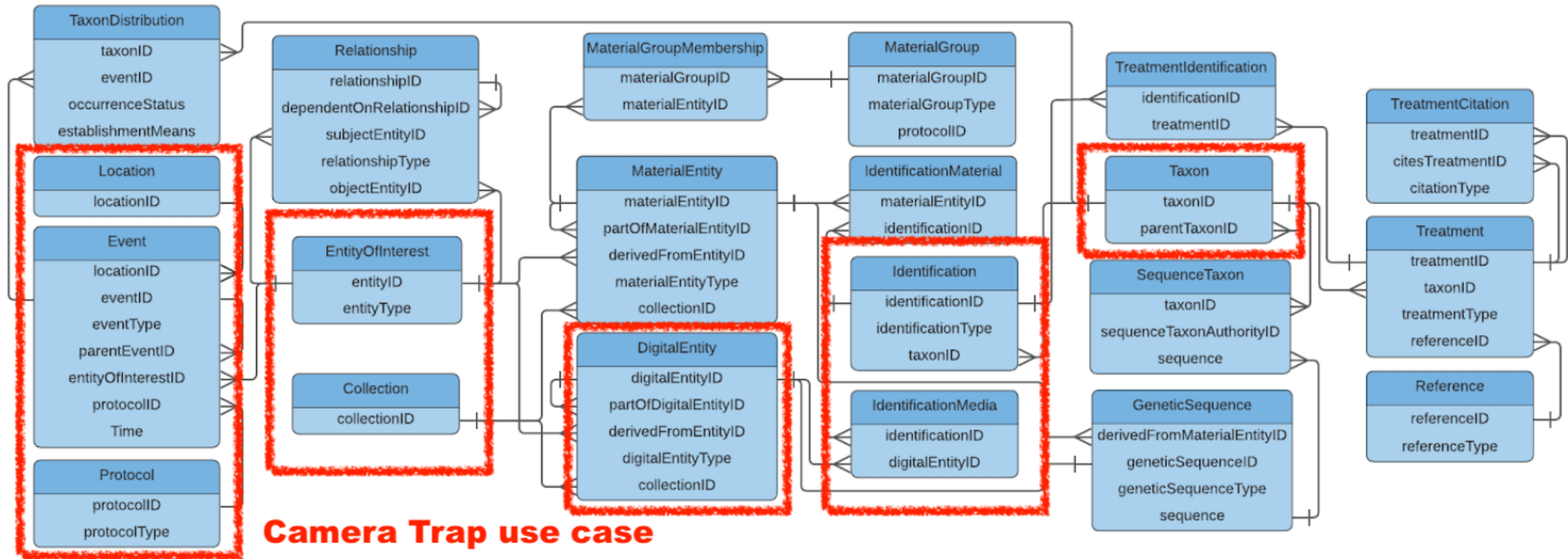## Diversifying the data model

Use Case narrative for eDNA barcoding, camera trap, tissu samples, iNaturalist, specimens with medias…
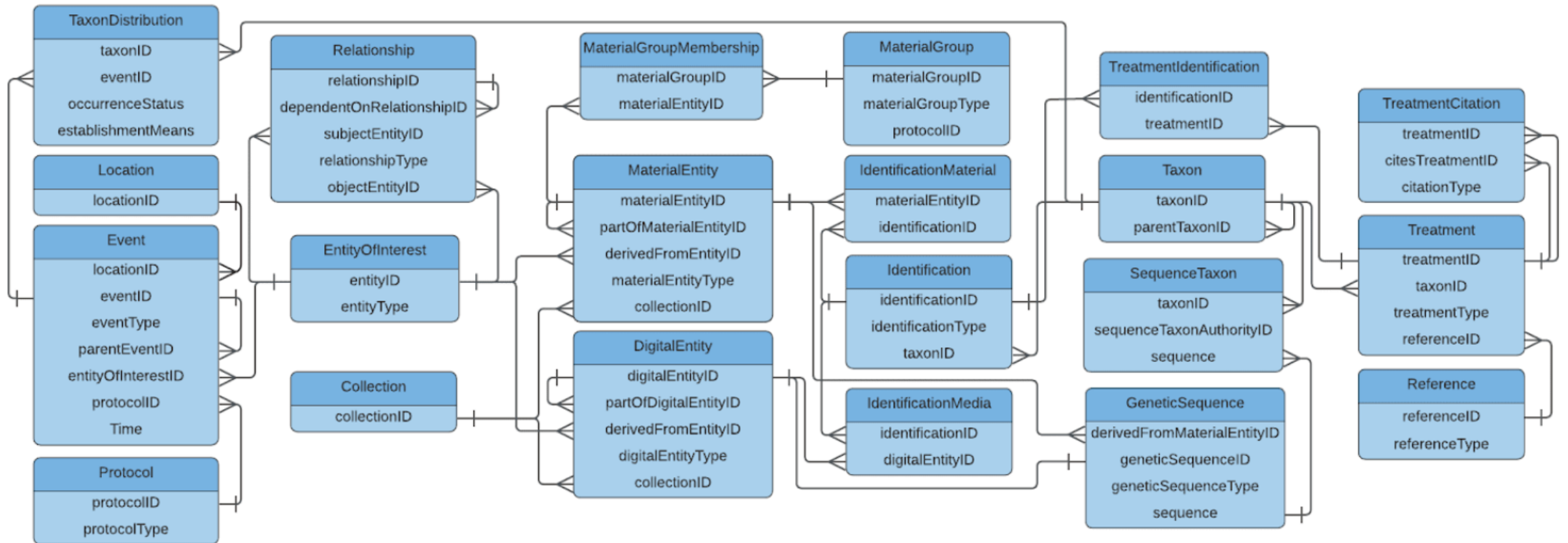
CONCEPTUAL ENTITIES

Diversifying the data model

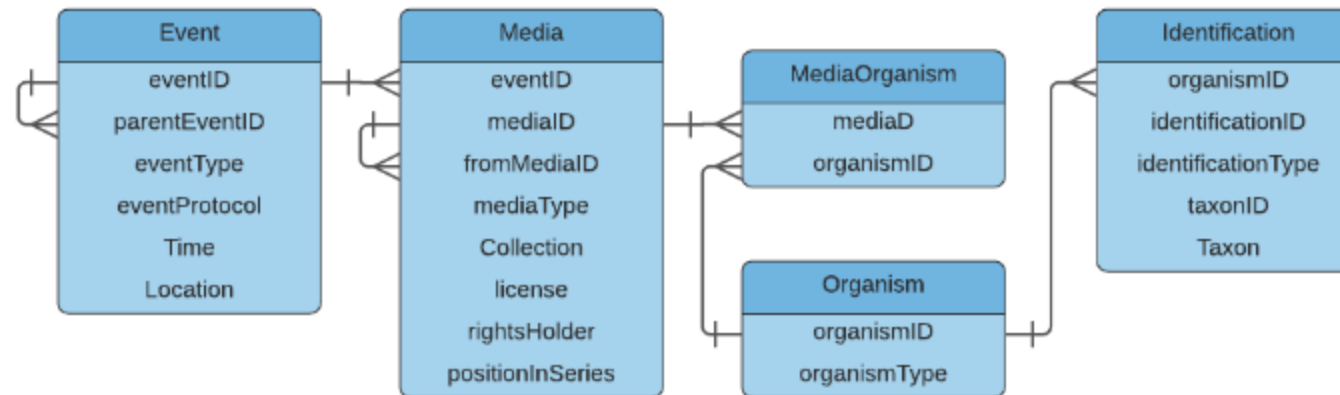Identifying conceptual entities from various use cases

GRAND UNIFIED MODEL

Diversifying the data model

Building a Common Unified Model

SIMPLIFIED CONCEPTUAL MODELS

Diversifying the data model

e.g. publishing Events associated with detecting
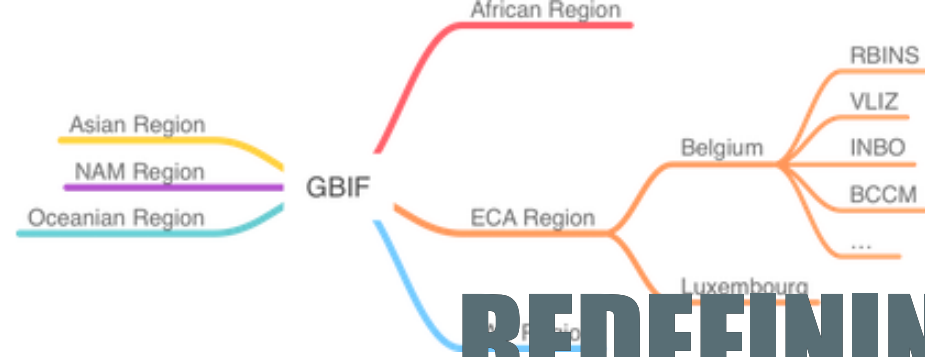and identifying organisms from media

DATA PACKAGING

Diversifying the data model

Toward a modern data packaging, such as Tabular data, to overcome the star schema limitations

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REDEFINING PARTICIPATION

Institutional view	Community of people
Regions, Nodes, BIFs, Publishers	Individuals working remotely, often part time
Standing Committees, Strategic plan, work programmes	workgroups, Git teams
Memorandum of Understanding, MoC, endorsement	employees and **volunteers**

The Belgian Biodiversity Information Facility
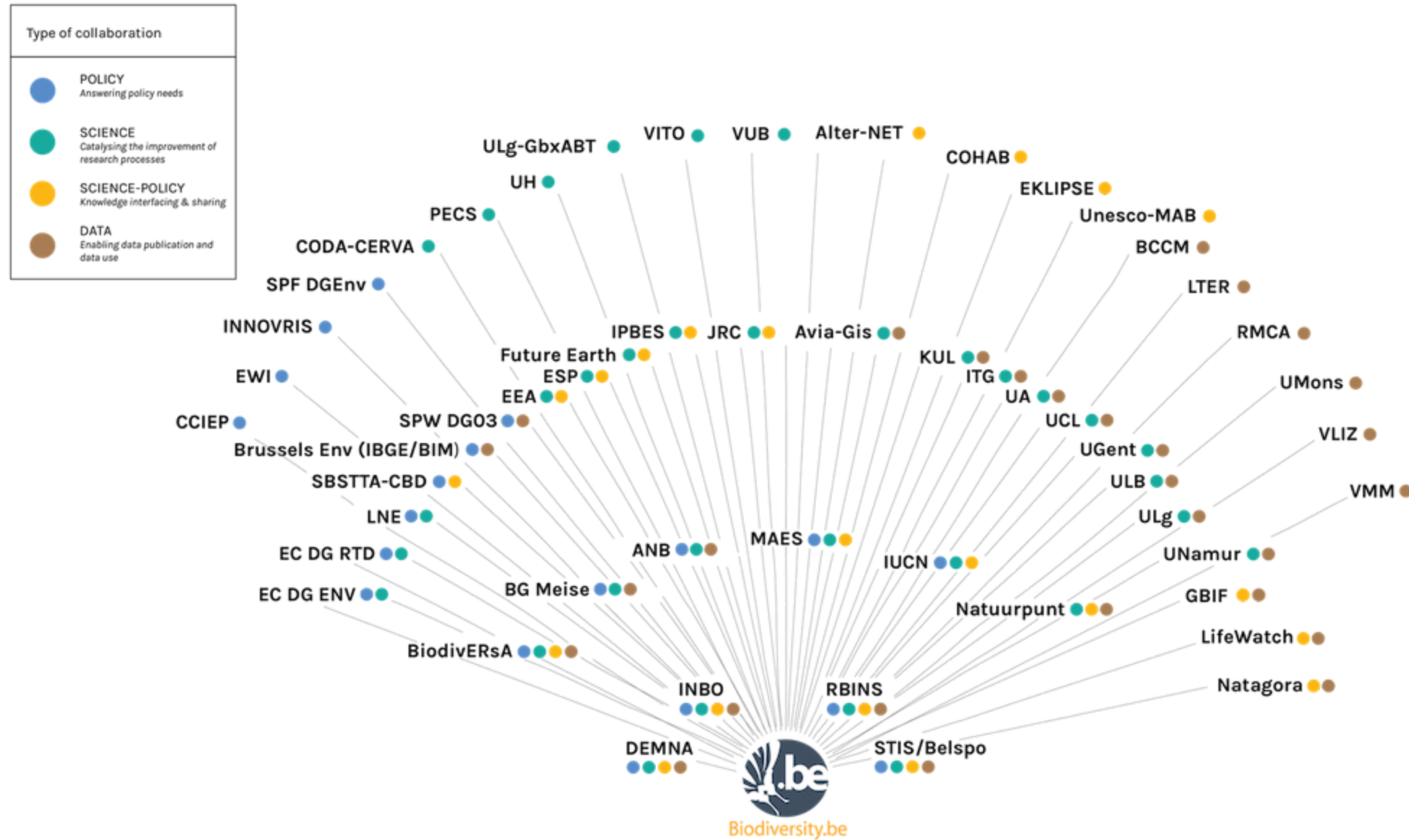
ALLIANCE FOR BIODIVERSITY KNOWLEDGE

Consultation on primary biodiversity data
and the Post-2020 Global Biodiversity Framework

Online consultation and webinar, Thursday 21 July 2022

"With the help of key partners across the science-policy interface,
the consultation will engage those involved in developing global and national indicators under the CBD's
post-2020 Global Biodiversity Framework (GBF) and Essential Biodiversity Variables (EBVs).""

TAKE HOME MESSAGE

- the future looks bright
- GBIF is reinventing itself
- a vibrant **global community** with **local/remote skills**
- Embrace the coming changes with your node
- Get involved in the process (if not already)
- Build bridges between:
  - Departments, Institutions, Partners
  - Disciplines and Technologies

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THANK YOU!

✉️ [@andrejjh](#) on twitter

Biodiversity.be

and thanks to **Carlos Alberto GH** Mexican street art painter,
WWF & Street Art for Mankind Together4Forests campaign