



ESFRI

2018 Roadmap Launch

DiSSCO

Distributed System of Scientific Collections



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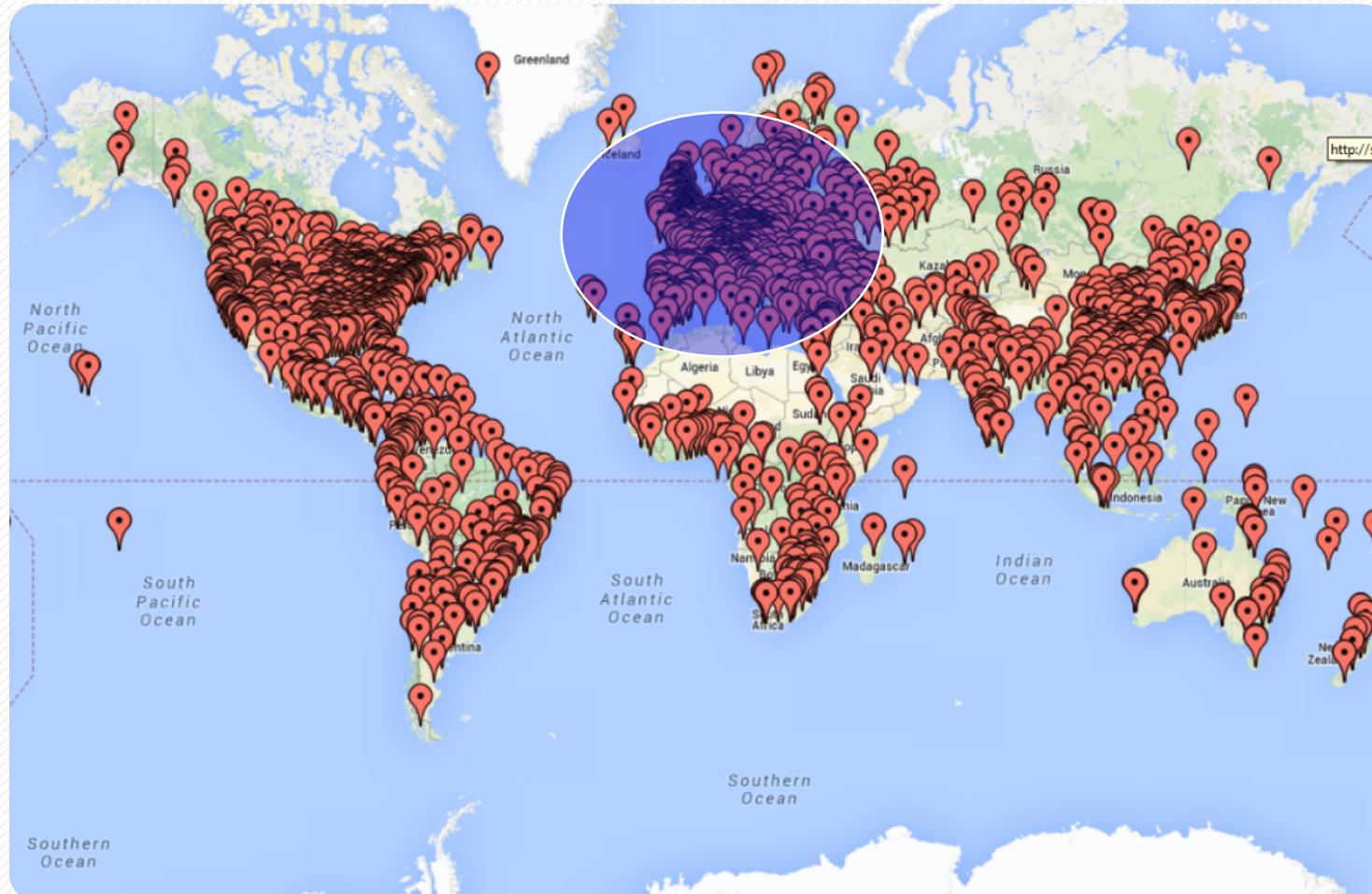
A collage of scientific specimens. The left side shows a collection of vibrant green metallic beetles, each pinned to a small white label with a thin metal pin. The right side shows a close-up of a bird's head, possibly a quail, with a blue mesh mask covering its face. The background is a mix of these two images.

Leading Scientific facilities for more than 400 years

**Natural Science Collections support
discovery and modelling of all life on earth**

Europe: the global leader

55% of the world's assets with rich historical and global distribution



European Collections:

1.5 billion specimens

80% of world's species

5,000 Scientific FTEs pa

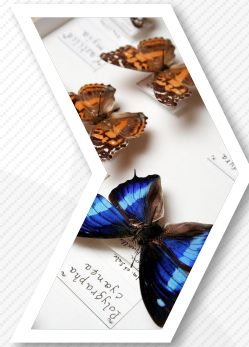
25,000 scientific visitors pa

10 million public visitors
pa

25 million web visitors pa



115 National Facilities
21 Countries



a new business model: **ONE EUROPEAN COLLECTION**

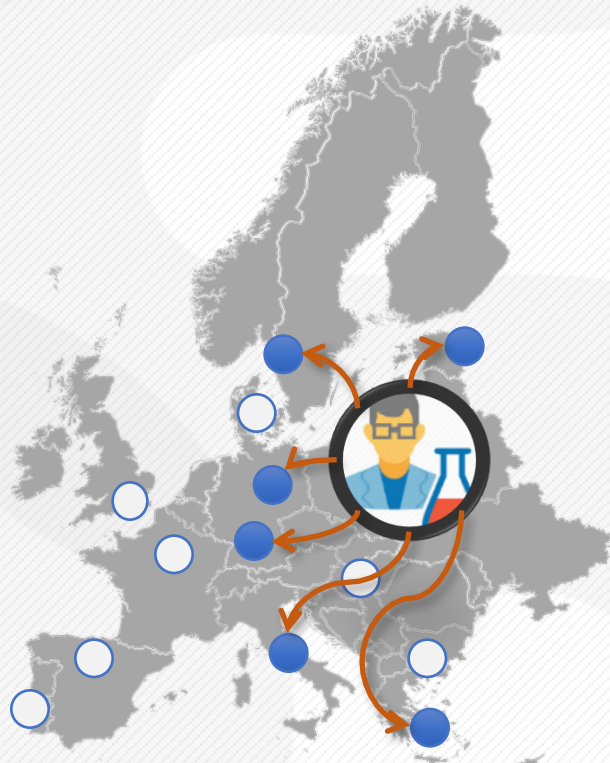
- Largest ever formal agreement between natural science collection facilities
- A system of distributed facilities
- Centralised shared governance model

- One European Collection of scientific assets
- Common Collections development strategy
- Economies of scope and scale
- Monitoring impact of collections (documenting ROI)
- Specialisation strategies (e.g. in alignment with national priorities, e.g. Smart Specialisation Strategies)
- Joint Research Agendas

Link dispersed information & Lower access barriers

Current model

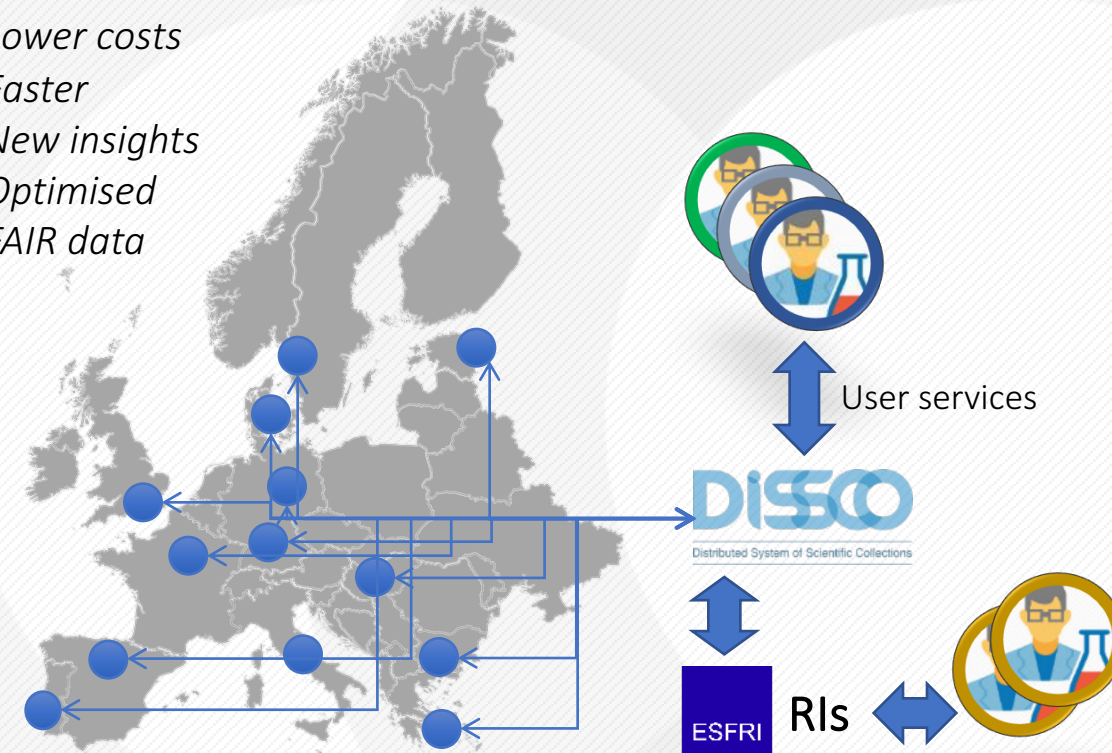
Slow
Expensive
Inefficient
limited



Example of current mode of operandi
25,000 researchers travel every year to physically access scientific collections and **800k objects** are packed and shipped (at an annual public cost of more than **€70M**)

Integrated RI model

Wide access
Lower costs
Faster
New insights
Optimised
FAIR data



The **first mass scale initiative to re-unite and serve** genomic, chemical, geographical, morphological and taxonomic information and link it to collections objects



Case study – Invasive Alien Species

UN Sustainable Development Goals (Target 15.8)

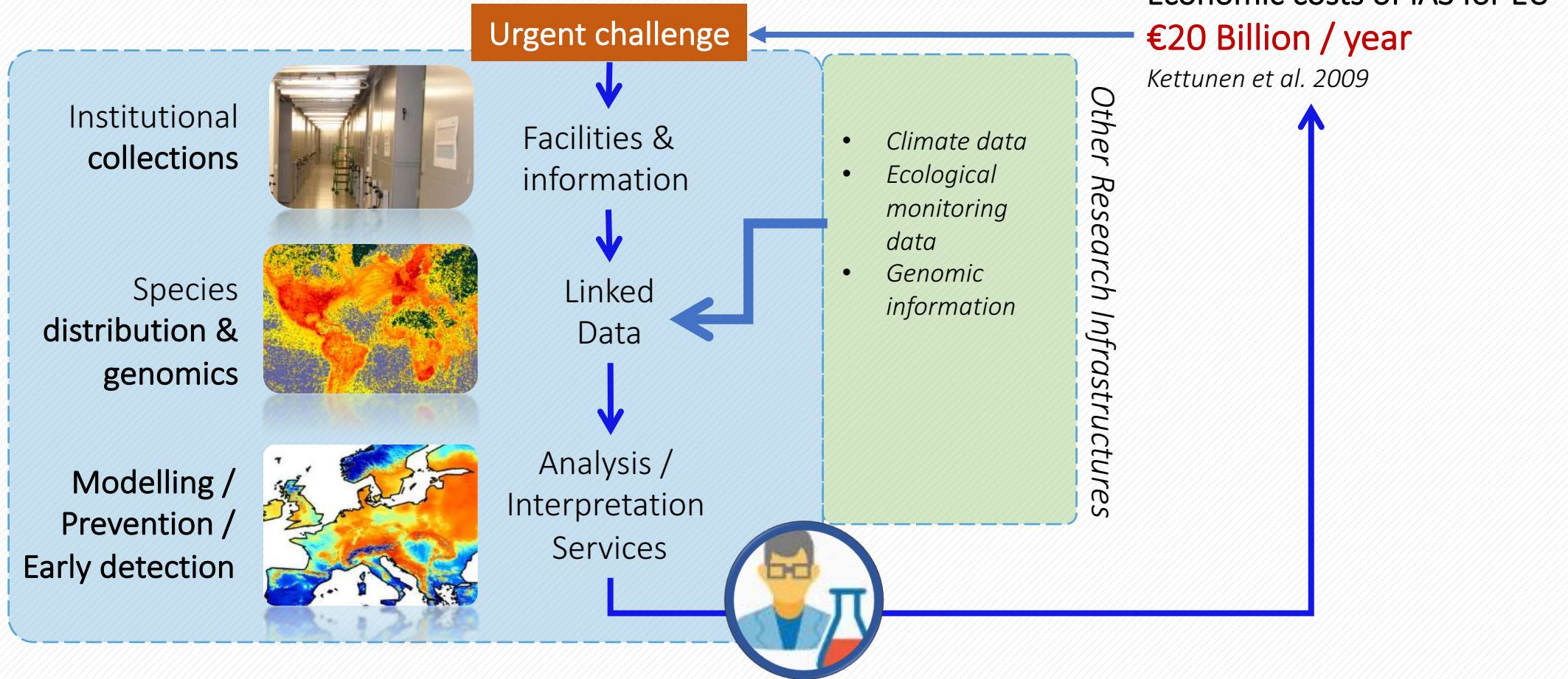
EXAMPLE: Alligator Weed

(*Alternanthera philoxeroides*)

Negative impact on native species, ecosystem services and infrastructure



DISCO
Distributed System of Scientific Collections



DiSSCo service portfolio by 2025

single
entry point 

1

e-Science services

A one-stop shop for services providing unified **discovery, access, interpretation and analysis** of complex linked data

2

Physical and remote
access services

A universal harmonised **physical access service** and **digitisation on demand** service

3

Support & Training services

Integrated **user support desk** and implementation of **multi-modal training programmes** to enhance skills & competencies

One world – One collection

Find out more at www.dissco.eu