DiSSCO

Distributed System of Scientific Collections

1,5 billion **specimens,** 5,000 **scientists,**
170+ **institutions,** 23 **countries…**

in 1 European digital **collection.**

The **Distributed System of Scientific Collections**
is a new world–class research infrastructure
for natural history collections. It aims to create
a new model for a single European collection
that digitally unifies all European natural science assets
under common access, curation, policies and practices.

**A true revolution
for natural history collections.**

Why DiSSCo?

Many European environmental research infrastructures aim at making use of geo and bio-diversity information for tackling grand societal challenges. The effectiveness of these initiatives, however, is based on the quality and availability of primary reference data that are often scattered and incomplete.

By bringing together European natural history collections and mobilising, harmonising and providing integrated access to their data, DiSSCo fills a significant gap in the value chain of European research infrastructures because it provides a fundamental basis of knowledge at an unprecedented scale and precision.

## Towards a new landscape of scientific research in Europe

DiSSCo will transform today's fragmented landscape of individual European natural history collections providing simple access to various data classes into a new reality: an integrated and sustainable knowledge base of unprecedented scale that links all data classes across institutions.

Fragmented RI model

Integrated RI model

User Services

DISSCO

ESFRI

Research Infrastructures

DiSSCO
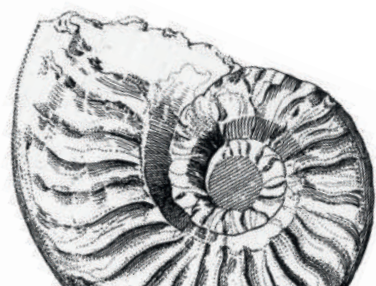
Distributed System of Scientific Collections

FAIR science, robust science

Research practice has changed dramatically in recent decades. Digital developments and new forms of molecular data have considerably increased the volume and diversity of information that can be derived from physical specimens, and in doing so, they call for an integrative approach to scientific research where cross-linked information effectively underpins the entire research life cycle and provides open access to mass and precise data.

DiSSCo's technical architecture has FAIR Digital Objects (FDOs) as its core basis. An FDO combines the general attributes of digital objects – units of data and/or metadata regulated by structures or schemas, and with a unique and persistent identifier (PID)– with the FAIR Guiding Principles, which put specific emphasis on making data findable, accessible, interoperable and reusable both by humans and computers for the reliable interpretation and processing of the data. The result is a data architecture that ensures robust science.
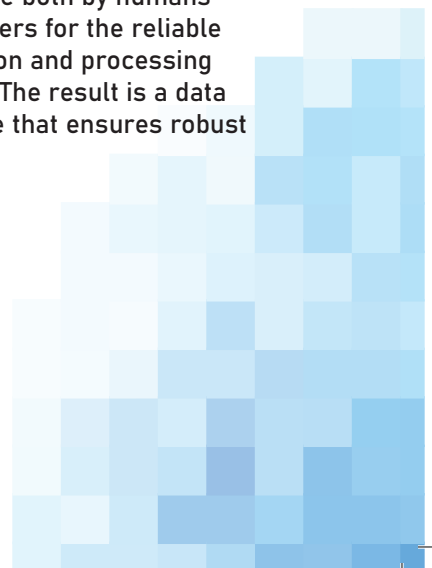
The "DiSSCo effect"

DiSSCo will bring about change to the landscape of European scientific research by:

- Creating a one-stop infrastructure providing discovery, access, interpretation, and analysis of complex linked data from natural history collections.

- Accelerating digitisation of natural collections to an industrial scale.

- Providing a full catalogue of end-user services for enhanced interpretation, curation, annotation and use of specimen data.

- Optimising collection physical and digital access, improving curation and management practices in individual institutions, boosting efficiency and enabling strategies under a common research agenda.

DiSSCo

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DiSSCo represents the largest ever formal agreement between natural history museums, botanic gardens and collection-holding universities in the world.

More than 170 institutions from 23 countries are part of DiSSCo. Participating countries: Austria, Belgium, Bulgaria, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Israel, Italy, Luxembourg, Netherlands, Norway, Poland, Portugal, Slovakia, Spain, Sweden, Switzerland, United Kingdom.

DiSSCo-linked projects

Contact:

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