WG4 Slot 1

Introduction, scope of the workshop

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mobilise

COST is an intergovernmental framework for European Cooperation in Science and Technology established to initiate networking and coordination of nationally funded research activities on a European level.

Major Aims of COST Action CA17106 , MOBILISE

❖ To build up a cooperative, inclusive, bottom-up and responsive network with active involvement of European stakeholders to **support research for biodiversity and geodiversity informatics.**

❖ **To facilitate knowledge and technology transfer** across stakeholders, bridging the gaps between biodiversity and geodiversity research and information technology best practices.

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WG4 Workshop "Data storage and archiving strategies"

❖ Identifying general strategies in the long-term storage and archiving of object data and assigned multimedia files.

   ■ Technical and content standards

   ■ Specific conditions (legal and administrative requirements).

❖ Approaches of storage and archiving solutions (large versus small collections),

❖ Archiving systems of various collections (networks and hosting agencies).

❖ Relations to major European open science and research data infrastructures

Goals and plans for future activities of WG4 within the next 2-3 years.

Natural History Collections = Natural Science Collections:
Records of the natural world - Descriptions of nature in space & time

Natural history collections housed and managed by

Public museums

Botanical gardens - What about Zoo's?

Universities

Private collections

Scientific value for understanding our planet's past and present providing a basis for predicting the future.

Biobanks for preserving the Earth's organismic and genomic

Europe NHC: 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 p.a.

25,000 scientific visitors p.a.

10 million public visitors p.a.

25 million web visitors p.a.

Natural History Collections

Must be maintained/preserved

but also

Supplemented so that scientists can continue to document and explore life on Earth.

As new investigative techniques emerge, we can discover more from studying such intact and well-preserved collections.

Data characteristics

Digitisation???

Catalog data - species name (scientific, common, taxonomic hierarchy)

Documentation - photo, 2D, 3D (360°C and/or scan), media

Location - coordinates, Google map, GIS maps, historical maps ect.

Time - period of gathering/occurrence (year, season etc.)

Characterization - morphological, genetic/genomic, isotop, metabolomics etc.

Scope of the workshop

Archiving is a special part of the data life cycle.

Collection data are created (digitalisation process), processed, edited, managed, analysed and during the whole process archiving takes place.

Data archiving has the goal to long-term preserve digital objects and data and make it available for coming generations.

Scope of the workshop

Collections have special requirements concerning archiving processes:

This workshop will elucidate this topic through discussion on:

- ❖ Existing (partial) archiving and long-term data storage solutions, commercial or not (slot 1) (A. Cazenave, P. Grobe)
- ❖ Standardisation, standards, formats (slot 2)
- ❖ New data type challenges (slot 3)

Scope of the workshop

What we want to achieve:

❖ Start to define the core demands of nature history collections concerning archiving processes

❖ Start to find a realistic way to write recommendations / guidelines (on some aspects?) for archiving processes in collections