Linking Biodiversity and Culture Information - LinBi

Milestone 2: Content Selection and IPR Guide v1.0

Basic Information

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Nature of the Milestone:	**R**
Dissemination Level	

PU	Public, fully open, e.g. web	PU
CL	Classified, information as referred to in Commission Decision 2001/844/EC	
CO	Confidential to LinBi project and Commission Services	

Contents

Abstract

From Grant Agreement CEF TELECOM CALL FOR PROPOSALS 2018 CEF-TC-2018-1. Art. 1.4:

Milestone 2: Content Selection and IPR Guide 31/05/2019 Publication of Best Practice Guide vl.O on IPR and Aggregation released on LinBi website, URL-address of pdf Version is provided.

The LinBi project enhances discoverability and reuse of existing biodiversity objects within Europeana. LinBi creates a new aggregation pathway to Europeana for biodiversity content and delivers approximately 1.3 million new biodiversity objects. LinBi aims to provide new methods of linking information objects using the LinBi enrichment platform to connect Europeana's biodiversity content with existing related content of various formats including video, audio, graphics, photographs and text.

LinBi action activities will introduce a new aggregation pathway to Europeana for enriched objects in the biodiversity domain. The LinBi platform will allow the interlinking of existing and new data items and the subsequent creation of 'compound enriched objects' (data items created during an enrichment process). Subsequently all data items will be processed by the OpenUp! Natural History Aggregator and delivered to Europeana.

This Milestone presents a brief definition of IPR and an overview of IPR found in the LinBi project. It identifies LinBi data formats and the various forms of IPR which are present in each, and outlines the LinBi project IPR guidelines. Data submitted by LinBi should conform to Europeana data requirements and thus Europeana's approach to IPR is briefly outlined below.

When selecting content for enrichment and aggregation, LinBi partners will assess content for suitability. 'Suitable' content is content that has a relationship to the central LinBi focus of biodiversity, and to related topics, i.e. issues with a relationship to the defined content clusters and topics as defined in the Grant Agreement and as noted below in Chapter 4. LinBi needs adequate metadata in order to correctly identify related content.

This guide to IPR builds on existing documentation (including OpenUp!, BHL-Europe, Europeana Pro, DISMARC and other sources) and will be updated at the conclusion of the Action. Annex 1 contains an IPR checklist drawing together all relevant aspects of IPR likely to be found in objects enriched by the LinBi action.

Introduction

What is IPR? Intellectual property (IP) refers to creations of the mind. These may include literary works such as novels, poems, plays, newspaper articles, etc., computer programs, databases, films, musical compositions and recordings, choreography, paintings, drawings, photographs, sculpture, specimen architecture, advertisements, maps and technical drawings.

IP is protected in law by patents, copyright and trademarks which enable creators to earn recognition or financial benefit from what they invent or create.

The ownership of intellectual property gives rise to certain rights, referred to as intellectual property rights (IPR). IPR is defined by the Organisation for Economic Cooperation and Development (OECD) as:

> "*The general term for the assignment of property rights through patents, copyrights and trademarks. These property rights allow the holder to exercise a monopoly on the use of the item for a specified period. By restricting imitation and duplication, monopoly power is conferred, but the social costs of monopoly power may be offset by the social benefits of higher levels of creative activity encouraged by the monopoly earnings*."

IPR regulations in the EU vary according to country. Variations include the definition of works which may be copyrighted, the duration of copyright and more. The European Parliament is engaged in harmonising IPR through the creation of a single European system in parallel with national systems. The EU has been making progress in harmonisation of national IPR regulations but there is still a long way to go before full harmonisation is achieved.

Within LinBi, we find IPR in the form of authors' rights and related/neighbouring rights. Authors' rights are direct rights granted to authors, and related/neighbouring rights are granted to performers, producers, photographers and broadcasters. These rights include:

- Economic rights which enable rights holders to control the use of their works and other protected material and be remunerated for their use. They normally take the form of exclusive rights, notably to authorise or prohibit the making and distribution of copies as well

as communication of the works to the public. Economic rights and their terms of protection are harmonised at EU level.
- Moral rights include the right to claim authorship of the work and the right to object to any derogatory action in relation to the work. Moral rights are not harmonised at EU level.

This document identifies the various kinds of IPR existing in the variety of objects and data provided by LinBi partners. We also identify IPR issues resulting from enrichment action by LinBi. The result of this enrichment will be the creation of new 'compound' objects, and we examine the IPR implications of using a variety of component objects to create such compound objects.

Existing Europeana guidelines provide a benchmark for our activities in this area. Our goal is to ensure that enriched, compound objects are available for use and reuse; that such IP restrictions as may exist are clearly identified and that the implications of any restrictions are clearly identified and are understandable. We will achieve this aim by ensuring that LinBi complies to Europeana data requirements, which are indicated below in chapter 4. We include as Annex 1 a set of best practice IPR considerations in the case of selection of objects for enrichment as 'compound objects'.

Chapter 1: LinBi Content Sources and Data Types

Content-owning partners in LinBi are natural history museums, botanical gardens and broadcasters. Each participant owns content involving IPR in the form of the rights of creators and others involved in the act of creation, including producers, performers, illustrators and photographers. Further, other content from non-partner sources will also be aggregated within the LinBi action.

LinBi partners and content providers' own content is drawn from a variety of sources and exists in various data types:

	Audio	Video	Photos	Graphic images & scans	3D models	Metadata	Prints
Agentschap Plantentuin Meise (APM)		x	x	x	x	x	
Botanic Garden and Botanical Museum Berlin-Dahlem (BGBM)		x	x	x	x	x	
Rundfunk Berlin-Brandenburg (rbb)	x	x		x		x	
Real Jardin Botanico (RJB-CSIC)						x	x

1: Content & Data Type

Chapter 2: IPR in LinBi

Various forms of IPR exist in content owned by LinBi partners, depending upon data type. LinBi will ensure that data submitted to Europeana, whether by content-owning partners or aggregated from

third parties, will conform to Europeana's data requirements, namely that all metadata will be submitted under a Creative Commons Zero Public Domain Dedication (CC0), and that all (non-metadata) content will be identified using the **edm:rights** field of the Europeana Data Model (EDM).

Rights to be observed include the following:

	Recordist	Producer	Publisher	Owner	Contributors	Database creator/s	Creator
Audio	x	x	x	x	x	x	x
Video	x	x		x	x	x	x
Text			x	x	x	x	x
Photographs / images			x	x	x	x	x

2: Content & IPR

- APM note that their camera trap pictures are CC-0 and metadata are CC-0, whereas their herbarium specimen images, photographs of the living collections, glass plates and portraits from the library are classified as CC-BY-SA, and currently the associated metadata are CC-BY. This matter will be addressed by APM in June 2019.
- RJB-CSIC Botanical Illustration Collection is classified as CC BY-NC-SA and the associated metadata are CC-0.
- All objects currently provided by BGBM to Europeana are available under a CC-BY license, metadata are CC-0.
- RBB metadata are available under CC-0.

Chapter 3: IPR in Compound Objects

The forms of IPR which LinBi is likely to encounter have been identified in Chapter 2 above. Objects found within Europeana consist of various elements:

- a Cultural Heritage Object (CHO) - the description of the whole object (e.g. image, herbarium sheet, sound file, animal etc.);
- a quantity of web resources (digital files connected to the CHO);
- aggregation information, specifying license info, providing institute, object type etc.

LinBi will create a quantity of 'enriched objects'. A compound 'enriched object' is an object which includes either or both links to other objects existing both inside and outside of Europeana and new metadata descriptions (web resources).

Enriched objects

An example of the process of creation of a compound enriched object:

- a researcher creates an object with the title 'Thrush' and connects various resources to the object:
  - a relevant camera trap image from APM;
  - the portrait of a scientist especially connected or knowledgeable about *Turdus philomenos* from the APM portrait database;
  - a sound file from "Tierstimmenarchiv" via the OpenUp! aggregator;
  - a new video sequence from the RBB archive, showing a flying thrush.

- The creator of the compound object adds:
  - further metadata information for the new CHO (dc:description, dc:creator, etc.);
  - links for images and sound files;
  - new metadata for the video sequence, as this is a new web resource.

IPR in compound objects

The ideal license for a LinBi compound object would be one which allowed further free re-mixing and enrichment of the entire object. However, various objects and resources may be subject to different licenses. Europeana always requires one license to be attached to an entire object and, in IPR terms, the new compound object is considered to be an object in itself. Thus, in the case that a compound object is subject to different and potentially conflicting licenses, **LinBi will as a default consider the most restrictive license to apply to the entire compound object.**

The nature of the enrichment will determine whether conflicting rights emerge as the result of enrichment. Europeana requires that all metadata published via the Europeana platform be made available under a CC0 license.

When the creation of a compound or 'enriched' object is achieved via the connection of related metadata, no further rights will arise when the compound object is aggregated to Europeana. However, where the creation of the compound object includes the addition of multimedia objects (e.g. invoking new web resources), then as-yet uncleared rights may be involved.

In Europeana each web resource (i.e. each digital object included in a Europeana object) may be subject to a different right. So in the case where web resources are subject to various licenses with different conditions, the safe solution is to declare that use of the compound object is subject to restriction. This would be achieved by assigning the http://rightsstatements.org/vocab/InC/1.0/ license. Should compound objects include objects where the ownership is not clarified, these objects can be provided to EUROPEANA with a due-diligence disclaimer.

Currently-available Europeana license statements can be found at https://pro.europeana.eu/page/available-rights-statements.

Chapter 4: Content Selection

Content Selection

LinBi partners will prepare new content for Europeana. From this content, clusters on specific topics will be formed. Two content clusters will be formed with 'amazing' content, namely the 'Examples of Exceptional and Unexpected Flora and Fauna' and highlights of the 'Masters of Botanical Illustration' content cluster.

When selecting further content for enrichment and aggregation via the LinBi enrichment platform, content will be assessed for suitability. 'Suitable' content is content that has a relationship to the central LinBi focus of biodiversity. Important aspects are the relevance of the topic to which data

refers, i.e. data that relates to the content clusters referred to above and to any related topics which may develop such as virtual exhibitions.

LinBi requires adequate metadata in order to correctly identify related content. LinBi has adopted the principle that adequate metadata for the purpose of interlinking is metadata that complies at least with tier B and preferably with tier C of Europeana's Publishing Framework.

LinBi will use a variety of content selection criteria. These are detailed below, using content from the RJB-CSIC's Botanical Illustration Collection to illustrate various criteria for selection.

What is the context and relevance of the object?

- **Does content fit within the general parameters of LinBi, marking the overlap between biodiversity and cultural heritage?**

The LinBi mission is to connect biodiversity with cultural heritage. For example, portraits of particular botanists can be connected to the specimen collected by them; film sequences of plants can be linked to relevant botanical drawings, users can identify all biodiversity samples that have been found in a specific locality.

Thus LinBi will determine whether objects are likely to build or enhance connections with other related objects within the LinBi action.

Is the object unique or rare?

- **LinBi is not looking exclusively for unique or rare objects, but will prioritize them.**

Bibliographical criteria:

- **Objects appearing in selected/well-documented bibliographies may be selected in preference to other, less-documented material.**

In the words of the Dutch botanist F. A. Stafleu, 'Die Botanische Illustration' by Claus Nissen "has become the bible of all those who love and use illustrated botanical works. The amount of information contained in Nissen usually far surpasses the expectations of its users and the book has become an indispensable tool of botanical bibliography".

Example from RJB-CSIC:

The books cited in this literature have been prioritized to make up the BIC content collection. Bibliographies have been carefully consulted by reviewing all printed books in botany published in Europe and America throughout history.

The consulted bibliography is:

- Nissen, Claus. Die Botanische Buchillustration : Ihre Geschichte Und Bibliographie. 2te Aufl. ed. Stuttgart: Anton Hiersemann, 1966.
- Johnston, Stanley H. Cleveland's Treasures from the World of Botanical Literature. Wilmington, Ohio: Orange Frazer, 1998.
- Pritzel, G. A. Thesaurus Literaturae Botanicae Omnium Gentium, Inde a Rerum Botanicarum Initiis Ad Nostra Usque Tempora, Quindecim Millia Operum Recensens [Recurso Electrónico]. Ed. Novam Reformatam. ed. Milano: Gorlich, 1950.

- Dunthorne, Gordon. Flower and Fruit Prints of the 18th and Early 19th Centuries : Their History, Makers and Uses, with a Catalogue Raisonné of the Works in Which They Are Found. Washington, D.C.: Author, 1938.

Copyright status:

In Europeana, all metadata is published as CC0. Object data is presented as 'rights-clarified', accompanied by an IPR declaration. Thus metadata which is not available under a CC0 license is not accepted by Europeana. Priority will be given to objects that can be used at no cost. Object data which is not clarified may be provided to EUROPEANA with a due-diligence disclaimer (see also chapter 3 of this publication).

Current and potential users:

As described in the LinBi Grant Agreement, target users/communities of interest for LinBi content are identified as:

- cultural and natural history community Researchers (biodiversity, cultural heritage) Educational content providers;
- broadcasters/journalists, multimedia content producers and providers;
- nature parks, preservation centres;
- museums, private collectors, botanical gardens;
- educators, students;
- policy makers, industry, SMEs;
- general public, nature lovers.

Content selection will be carried out considering the quantity of actual/potential users for such content.

Example of current users from RJB-CSIC:

- amateurs (i.e. non-specialist), natural history enthusiasts;
- gardeners: collection comprises an excellent tool to support daily work ;
- botanical scientists and taxonomists: botanical illustrations are a valuable;
- tool for a great number of botanists, and an essential complement to botanic works such as floras gathering the diversity of botanic species of a specific areas, such as a region or country physicians and pharmacists: to illustrate scientific works regarding properties of medicinal plants;
- designers of applied arts, in support of learning about techniques used in botanical illustration throughout history, to find inspiration in old illustrations for use in contemporary design;
- European citizens interested in the biodiversity and national natural heritage;
- cultural heritage professionals;
- students of all levels: this collection can be used as a primary source.

Educational use:

LinBi aims to support the reuse of curated content outcomes in exhibitions, campaigns, short stories, blogs, etc., and educational use is central to this strategy. According to Europeana's statistical

reports, visits to curated topics are much greater in number than those to non-curated content. LinBi will make its content student-friendly by offering pre-selected topics both general ('Roses', 'Wild Animals in the Garden', 'Food & History') and specific, such as 'Medical Uses of Plants'.

Example from RJB-CSIC:

The potential use for education, specifically for teaching of plant depiction, was the founding reason for the creation of the BIC. It has been demonstrated that scientific drawing can be considered as an excellent learner-centred method of building botanical knowledge (Bethan C. Stagg, Michael F. Verde, 2018)

Related topics:

'Related Topics' are areas of interest in which we find objects to which LinBi can link. LinBI will assess whether related themes are of general interest or specific interest, and whether related objects are sufficiently well-represented in (i.e.) Europeana.

Example of related topics from the RJB-CSIC collection:

- Scientific/botanic expeditions
- Ethnobotany/useful plants/medicinal plants
- Edible (wild) plants
- Plants in garden history
- History of plants
- (Historic) botanical gardens
- Horticulture/ornamental plants
- Gardening techniques
- Agriculture - agricultural plants
- Antique plants
- Poisonous plants
- Native plants/endemic/exotic/invasive

Technical requirements:

LinBi technical requirements for data format and interoperability are defined in the LinBi GA, Part D) and by relevant Europeana standards (Europeana Publishing Framework).

The OpenUp! Natural History Aggregator currently allows the submission of data in the ABCD(EFG), DarwinCore and LIDO standards. LinBi will add new metadata formats to this list of transformation standards, such as MARC21, Qualified Dublin Core and Broadcast Media Format.

See also Europeana Publishing Framework: Metadata

Chapter 5: Europeana

Europeana provides a user-friendly overview of the current IPR status of every object discoverable via Europeana, under the heading **'Can I Use It?'**. Text and icons indicate the status of the selected object.

To achieve this clear and informative overview, Europeana provides a set of guidelines which can be interpreted as Best Practice recommendations for all content found via Europeana. These guidelines cover four main areas:

1. Data Exchange Agreement (DEA) - instructions/recommendations for data providers;
2. Creative Commons – publication of metadata by Europeana;
3. European Terms for User Contributions: conditions for user-generated content;
4. Europeana Data Model (EDM) – technical requirements for all Europeana-published metadata following the EDM.

Europeana describes the guidelines as follows (excerpts only – follow links for full text):

1. The Data Exchange Agreement

The DEA structures the relationship between Europeana and its data providers.

- All metadata submitted to Europeana will be published as open data under the terms of the Creative Commons Zero Public Domain Dedication (CC0).
- Each digital object (which includes the associated preview) that is available via Europeana needs to carry a rights statement that describes its copyright status. If an object is in the public domain, it must be labelled as being in the public domain.

More about the DEA.

2. The Creative Commons Zero Universal Public Domain Dedication (CC0)

Europeana publishes all metadata received from its data providers under the terms of the Creative Commons Zero Universal Public Domain Dedication (CC0). More about CC0 and data use guidelines.

3. Europeana terms for user-contributed content.

These terms apply to end users who contribute content to Europeana (usually as part of Community Collection projects). These terms have been developed so that Europeana can use content provided by its users and be able to integrate with other Europeana held content and data.

Read the terms for user contributions.

- All Content that is protected by Intellectual Property Rights contributed by the User to the Website will be made available by Europeana to Third Parties under the terms of the Creative Commons Attribution-ShareAlike 3.0 Unported licence. Content that is in the Public Domain will be marked with the Public Domain Mark.
- If the User is the proprietor of the Intellectual Property Rights of the Content contributed by him/her; he/she hereby authorises Europeana to perform Article 5.1 with respect to that Content. If the User is not the proprietor of the Intellectual Property Rights of the Content contributed by him/her, he/she guarantees that either:

    - he/she is authorised by the proprietor of the Intellectual Property Rights of this Content to authorise Europeana to perform Article 5.1 with respect to that Content; or
    - the Content is in the Public Domain.

4. Europeana Data Model

The Europeana Data Model (EDM) is a framework for collecting, connecting and enriching metadata. It adheres to the modelling principles underpinning the approach of the Web of Data ("Semantic Web"). The Europeana EDM dataset will in principle be able to link into the Web of Data once open, meaning that visibility and access to Europe's cultural heritage resources will increase for those who contribute. Europeana could potentially be the new cultural node in the Web of Data.

The EDM transcends domain-specific metadata standards, yet accommodates the range and richness of community standards such as LIDO for museums, EAD for archives or METS for digital libraries. EDM guidelines specify how data should be formatted for use by Europeana. Europeana uses the contents of the **edm:rights** field to indicate to end users under which terms they can use the previews and digital objects that they find via Europeana.

Read the EDM Guidelines.

Chapter 6: Resources and Further Reading.

Below are a variety of resources for further information on the topic of IPR, from various perspectives.

EU:

- Digitisation and dissemination of orphan works (Orphan Works Directive)
- Management and licensing of rights (Collective Rights Management Directive
- Licenses for Europe stakeholder dialogue
- Database legislation
- Single market copyright legislation
- Single market modernisation of copyright regulations and copyright reform FAQ
- Factsheet summarising action taken by the European Commission in copyright legislation

EU Reference:

- Obligations of the EU and its Member States under the Berne Convention
- Obligations of the EU and its Member States under the Rome Convention
- Obligations of the EU and its Member States under the World Trade Organisation 'TRIPS' Agreement
- Obligations of the EU and its Member States under the 1996 World Intellectual Property Organisation (WIPO) Internet Treaties:
    - the WIPO Copyright Treaty
    - the WIPO Performances and Phonograms Treaty
- Obligations of the EU and its Member States under other WIPO Treaties:
    - the Beijing Treaty on the Protection of Audiovisual Performances
    - the Marrakesh Treaty to Facilitate Access to Published Works for Persons who are Blind, Visually Impaired or otherwise Print Disabled
- General EU IPR overview

Europeana:

- Europeana Licensing framework
- Use of the Europeana portal

- Europeana Publishing Framework: Metadata

Linking Biodiversity and Cultural Heritage (LinBi)

- Website: LinBi

Creative Commons Licenses

- Overview

Annex 1: IPR & Content Selection Checklist

This checklist identifies various areas of IPR encountered in objects selected by LinBi partners for enrichment, for aggregation and inclusion in virtual exhibitions. These guidelines contain criteria which should be considered when selecting content for these purposes.

Copyright Status	
Is the IPR status of the object/objects clarified and documented? Europeana additionally requires that all metadata must be available under CC0.	
Users	
To whom is the current object important, and who might the future user communities be?	
What is the current demand? Can you quantify the anticipated demand?	
General	
Significance of the collection	
What is the significance of the collection, why is it important? What is the intellectual value of the proposed collection to researchers	
Organization and descriptive metadata	
Is there adequate metadata for the selected object/s?	
Relationship to other digital collections	
Are the related collections/themes/topics already in existence? Is this a positive or negative attribute?	
Formats and languages	
Are the object formats appropriate to Europeana requirements? In which languages are the objects available?	
Uniqueness	
Has another institution digitized the same, or similar, materials?	
Is the object unique or rare?	
Organization and Available Documentation	
Is the material in a coherent, logically-structured order?	
Is the material paginated or is the arrangement suggested by some other means?	
Is the material complete? If not, is this important?	
Is there adequate descriptive, navigational, or structural information available about the material, such as bibliographic records or a detailed finding aid?	
How large and complex in terms of document variety is the collection?	
Intended Use	
What kinds, level, and frequency of use are envisioned?	
Is there a clear understanding of user requirements?	
Is this object useful for/of interest to a wide variety of audiences?	
Do your principal users have adequate computing and connectivity to make effective use of these materials?	
Is there a perceived public demand, have there been user suggestions on this topic?	
Institutional issues	

Does the proposed selection align with your institution's collection development priorities and strengths?	
Are there related institutional activities - exhibitions, publishing and collection acquisition?	
Are there any technical implications for discovery, delivery or user engagement?	
Can your institution support a range of uses, e.g., printing, browsing, detailed review?	
Are there issues around security or access that must be taken into account (e.g., access restricted to certain people or use under certain conditions?)	