# 8.5 Work package description

# Work package Description

Work package number :	1	Start date:	M1	End date:	M36	
Work package title:	Project Coordination and management					

#### Objectives

Administrative objective: Ensure adherence of the consortium to the rules, regulations, and financial guidelines of the *e*Content*plus* programme; establish the project in the European biodiversity community.

**Technical objective:** Implement the project as set out in the work plan; ensure exchange of information and communication between partners; ensure progress of the project; guarantee timely deliverables.

**QA objective:** Ensure verifiable progress of the project and be committed to high quality output that has tangible impact on *e*Content*plus* programme objectives.

#### Description of work

#### Task 1.1 – Administrative coordination

1.1.1 – Resource planning (financial, personnel, material), monitoring and controlling.

- 1.1.2 Liaison between the Commission, consortium members, EUROPEANA, BHL, and external experts; effective communication with the consortium members, Work Package leaders, the Commission, and interested external parties; coordination of meetings and progress reviews.
- 1.1.3 Production and consolidation of periodic external reports, including cost-statements; internal quality assurance; set-up of the Web-based project management portal.
- 1.1.4 representing the project.

#### Task 1.2 – Technical coordination

- 1.2.1 Work-package and task coordination.
- 1.2.2 Project plan maintenance; monitoring of project progress and milestones; identification and trouble shooting of technical and organisational problems.
- 1.2.3 Timely production of deliverables.
- 1.2.4 Quality control against the technical and contractual aspects; coordination with EDL Foundation Office.
- Task 1.3 Quality assurance: Definition and communication of quality assurance procedures via project management portal, coordination of quality assurance process (internal as well as external review procedures for the various project results and deliverables).

## Task 1.4 – Business plan

- 1.4.1 Investigate services that help the sustainability of project results
- 1.4.2 Identify related networks or organisations interested in the implementation of project results
- 1.4.3 Develop a business plan for long term sustainability with WP2 and WP3

## Task 1.5 – Networking and clustering activities

- 1.5.1 Coordinate with relevant partner networks; Identification of new important networks as potential disseminators of project results; Identification and analysis of stakeholders
- 1.5.2 Contribute to the clustering activities of the EC.

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## Milestones<sup>1</sup> and expected result

**Responsibility:** MfN (Project Coordinator) and all other consortium partners

M1.1 Kick-Off Meeting (M 0)

M1.2 Project management portal including agreed quality assurance procedures (M 3)

M1.3 Agreement on TMB and CWG (M 3)

M1.4 Annual (Technical) Review 1 (M 12)

M1.5 Annual (Technical) Review 2 (M 24)

M1.6 Final Review (M 36)

## Deliverables

D1.1 Progress Report 1 (M 6)

- D1.2 Progress Report 2 including pre-financing request (M 12)
- D1.3 Annual Report 1 including first ideas for BHL-Europe business plan (M 12)

D1.4 Progress Report 3 (M 18)

- D1.5 First overview of the business plan for long-term sustainability (M 24)
- D1.6 Progress Report 4 including pre-financing request (M 24)
- D1.7 Annual Report 2 (M 24)

D1.8 Progress Report 5 (M 30)

D1.9 Business plan for long-term sustainability (M 36)

D1.10 Implementation of results of BHL-Europe in other projects (M 36)

D1.11 Progress Report 6 and Final Report including Financial Statement (M 36)

D1.12 Final Report (M 36)

# Work package Description

Work package number :	2	Start date:	M1	End date:	M36	
Work package title:	Analysis of domain content and management of the content acquisition process					

## Objectives

**IT objective:** Establish bibliographic database systems, metadata repositories and Web-based content management systems.

**Management objective:** Ensure that all relevant biodiversity literature is listed to be scanned following a priority list; ensure that all content providers agree on the technical architecture of the project; ensure effective scanning in all content providing institutions; ensure linkage to EUROPEANA; ensure extension of the content providing network.

<sup>&</sup>lt;sup>1</sup> A milestone is a scheduled event marking the completion of a major part of the project work. It is used as a project checkpoint to validate how the project is progressing and revalidate work. Milestones numbers indicate the work package they relate to (e.g. M2.1 is the first Milestone of work package 2).

# Task 2.1 – IT Development

- 2.1.1 Establish a bibliographic database system and metadata repository for monographs and serials based on the Virtual Taxonomic Library developed in EDIT, and also the experiences of the BHL.
- 2.1.2 Develop and enhance deduplication tools for monographs and serials based on BHL technologies.
- 2.1.3 Develop a Web database to support analysis of domain content and management of the scanning process based on 2.1.1 and 2.1.2 (database of the taxonomic literature that indicates (a) the portion that is already available in digital form, (b) the portion that is in the process of being digitised, and (c) the portion for which plans have been created for digitisation).

# Task 2.2 – Analysis of domain content

- 2.2.1 Establish a list of monographs and serials that are relevant for the biodiversity community.
- 2.2.2 Use of the Web-database to identify the distribution of this relevant literature in the libraries of the content providers.
- 2.2.3 Identify responsibilities for content contribution (which institution should provide the identified content under consideration of technical qualification, data standards, IPR).

# Task 2.3 – Management of the content acquisition process:

- 2.3.1 Identify content holder requirements; develop the Memorandum of Understanding.
- 2.3.2 Assist partners in implementation and evaluation of scanning operations; control duplicate scanning of literature (using results of task 2.2); discussion and distribution of data standards and specifications; work with individual donors and governments to facilitate the funding of the scanning; attracting new content providers.
- 2.3.3 Coordinate with EUROPEANA, BHL and national scanning projects to ensure that material scanned by BHL-Europe is available through these portals.
- 2.3.4 Addressing IPR issues in cooperation with WP4.
- 2.3.5 Take into account multicultural and multilingual aspects.

# Milestones<sup>1</sup> and expected result

**Responsibility:** MfN (Work Package Leader) and all consortium content providers. The labour effort distribution among the partners was calculated mainly based on the amount of content and the current status of the digital repository of the particular consortium partner. Partners with large but less well developed repositories have more hours on the project than partners with small but easy to harvest repositories. However, once the connection between the repositories is established, it is not very time-consuming to maintain the connection and to ensure a constant delivery of content to the portal. In addition to this task, each content provider contributes to the enhancement of the content database. Depending on the extent of own scanning initiatives this is more or less time-consuming.

M2.1 Memorandum of Understanding signed by all content providers (M 6)

## Deliverables

- D2.1 Catalogue of content holder requirements (quality, quantity, accessibility, standards and specifications of content and metadata) (M 3)
- D2.2 Prototypes of deduplication tool and bibliographic database system for monographs and serials (M 9)
- D2.3 Prototype of Web-database for content management and collection analysis (M 12)
- D2.4 Content analysis and management status report 1 (metadata, page numbers, content providers) (M 12)
- D2.5 Final and enhanced Web-database for content management and collection analysis (M 24)

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D2.6 Delivery of the first version of the approved best practice guidelines and standards (M 24)

D2.7 Content analysis and management status report 2 (metadata, page numbers, content providers) (M 24)

D2.8 Content analysis and management status report 3 (metadata, page numbers, content providers) (M 36)

D2.9 Delivery of the final revised best practice guidelines and standards (M 36)

# Work package Description Work package number : 3 Start date: M1 End date: M36 Work package title: Technological implementation

## Objectives

Management and coordination of technological development and associated standards to allow for a pan-European, distributed and multilingual BHL-Europe. The technological implementation will concentrate on the innovative application of proven technologies to deliver stable and sustainable solutions.

### Description of work

### Task 3.1 – Technological implementation (Overall Coordination)

- 3.1.1 Management of the technical development team.
- 3.1.2 Adaptation of EUROPEANA and BHL data model, workflow, harvesting procedure, standards, specifications.
- 3.1.3 Definition of own standards for images, metadata, harvesting according to partner requirements (consensus-building).
- 3.1.4 Liaise with scanning centres of the national initiatives for post-processing of content.
- 3.1.5 Development and adaptation of specific tools; implementation and adaptation of taxon finder and name recognition tools; improvement and implementation of OCR techniques.

## Task 3.2 – Technical integration with EUROPEANA, BHL and national platforms

- 3.2.1 Ensure that the standards for data management and image formats are consistent with international requirements and specifically the EUROPEANA and BHL, adoption of EUROPEANA Semantic Elements (ESE).
- 3.2.2 Develop a distributed data model which will allow countries to retain control of their data, while enabling the material to be available through EUROPEANA, the BHL Portal (with Taxonomic Intelligence tools), and any national portals.
- 3.2.3 Build a prototype distributed data system for the German language material, and integrate with the BHL Portal.
- Task 3.3 Addressing distributed access and storage long-term sustainability: Develop a distributed access and storage system to enable national and international storage of the scanned materials; to develop the storage system in such a way that long-term sustainability of the data is secured.

## Task 3.4 – Enabling BHL Portal access in European languages – interfaces, usability, and mobility

- 3.4.1 Work with the EUROPEANA to create multiple language access to the BHL Portal.
- 3.4.2 Create a prototype portal in German to allow access to the BHL Portal.
- 3.4.3 Apply the model to the key European languages (English, French, German, Italian, Portuguese, Spanish, Danish, Dutch, Czech, Hungarian, Polish, Swedish), enabling access to the BHL Portal throughout Europe.

# Milestones<sup>1</sup> and expected result

**Responsibility:** WP3 will be led by NHM London. It is important that this work package is led by a partner institution that has capacity and experience in delivering this type of technical project. The NHM's leadership role in BHL and EOL as well as its contribution to other related projects e.g. EUROPEANA, EDIT, SYNTHESYS, Key2Nature, makes it a suitable candidate.

Each sub-work package in WP3 will have a specific structure, starting with production of an options appraisal and assessment papers that will review standards and technologies. This will enable the technology development team/board to agree standards policy or implementation plans for specific products under each heading.

M3.1 All sub-work packages produce options appraisals for all products/work streams and detailed implementation plans agreed for years 2 and 3. This would include the issuing of all standards, data models, technology standards, preferred technologies, etc. required for implementation (M 6)

M3.2 Technology review based on German prototype instantiation (M 12)

#### Deliverables

- D3.1 Deliver composition of Technology Management Board and initial meeting (M 3)
- D3.2 Document agreed standards, best practice and system components (M 6)
- D3.3 Plan for managing interoperability issues, data harmonisation and the integration of the content into BHL-Europe, EUROPEANA and the BHL (M 6)
- D3.4 Implement plans for all components in WP3, incl. data models, technology standards etc. (M 9)
- D3.5 Technical architecture status and progress report with particular focus on the development of the German prototype (M 12)
- D3.6 Release of German prototype (M 18)
- D3.7 Key components documented for output of D3.5 e.g. BHL-Europe Portal, OCR demonstrators, distributed storage model, etc. (M 24)
- D3.8 Sustainability policy for continuation of service e.g. hosting, future development, helpdesk provision for service users/content providers etc. (M 30)
- D3.9 Live BHL-Europe system, with distributed storage and management and appropriate tools for the continued development of services and ingress of multilingual content (M 36)

# Work package Description

Work package number :	4	Start date:	M1	End date:	M36
Work package title:	Intellectual Property Rights				

#### Objectives

Management and coordination of the intellectual property rights (IPR) framework for BHL-Europe and agreements with Rights Holders. Ensure that BHL-Europe, EUROPEANA, and the BHL are using common approaches and common agreements, such that data can be exchanged between these partners without further Rights activity.

N.B. The majority of the material being digitised by partners is public domain, and where the Rights have expired. This material will remain public domain and be freely available to all users.

<sup>&</sup>lt;sup>1</sup> A milestone is a scheduled event marking the completion of a major part of the project work. It is used as a project checkpoint to validate how the project is progressing and revalidate work. Milestones numbers indicate the work package they relate to (e.g. M2.1 is the first Milestone of work package 2).

## **Description of work**

- **Task 4.1 IPR Framework:** Establish IPR working documents including best practice guide, due diligence guide, pro-forma agreements, and process for formally agreeing rights management with rights holders; align the approach with EUROPEANA and BHL and maximise level of interoperability including Rights metadata exchange.
- Task 4.2 IPR Agreements with Data Providers: Complete formal IPR agreements with data providers identified in WP2; keep records of all agreements secure.
- Task 4.3 IPR Agreements on projects results and outcomes: Develop IPR framework for long-term sustainability and long-term access to the digitised content of BHL-Europe, and ensure that EUROPEANA and BHL have long-term access to the material and associated Rights.

## Milestones<sup>1</sup> and expected result

**Responsibility:** WP4 will be led by the NHM. The NHM has a dedicated IPR Officer and access to the advice of a law firm (Farrer and Co.) who are experts on IPR, together with pro bono service from the Electronic Freedom Foundation lawyers in San Francisco, USA.

M4.1 A working agreement on IPR will be in place with EUROPEANA and BHL (M 9)

### Deliverables

- D4.1 Delivery of IPR working documents, including best practice guide, due diligence guide, pro forma agreements and process for formally agreeing rights management with rights holders. Complete agreement with EUROPEANA and BHL for reciprocal access and Rights metadata. (M 9)
- D4.2 Complete signed agreements with first group of rights holders to enable material to be used in the BHL or EUROPEANA, and establish process for addition of further material. (M 24)
- D4.3 Deliver IPR framework to support long-term access and sustainability of the digitised material (M 24)

# Work package Description

Work package number :	5	Start date:	M1	End date:	M36	
Work package title:	Dissemination, Exploitation and Evaluation					

## Objectives

**Dissemination objective:** Develop dissemination strategy; raise awareness, understanding and action of the project among the community and stakeholders in EU member states; ensure effective dissemination of project goals and results to the target users; ensure good communication within the European scientific community

**Presentation and demonstration objective:** Ensure dissemination of project results at conferences, public events and among the networks of the consortium members

**Exploitation objective:** Ensure implementation of project results in other projects, initiatives, institutions, and countries

Evaluation objective: Monitor the level of use of BHL-Europe; survey the users of the Web Portal

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# Task 5.1 – Establish BHL-Europe Communications Working Group

# Task 5.2 – Develop and establish Web environment

- 5.2.1 Plan, design, publish, maintain, and update BHL-Europe Web site for internal and external communication with publication of all relevant results and links to partner networks.
- 5.2.2 Develop a mailing list to facilitate communication of new developments (internal and external); update the list regularly to include all relevant parties.
- 5.2.3 Develop self-running demonstrators to illustrate BHL-Europe use and functionality.

# Task 5.3 – Develop and prepare promotional materials and newsletters, press relations

- 5.3.1 Develop, prepare, and update target group specific promotion kits (fact sheets, flyers, posters, presentations) and related printed matters (e.g. illustrated book on best practice guidelines and standards for the public).
- 5.3.2 Prepare a quarterly newsletter to be published online.
- 5.3.3 Ensure proper press relations; maintain the press review; distribution of articles for various types of print and online media (journals, newspapers, blogs).

# Task 5.4 – Demonstration and awareness raising

- 5.4.1 Prepare and update multimedia presentation (automatic demonstrator) as information about the project for the general public.
- 5.4.2 Maintain and update the database of conferences and public events relevant for BHL-Europe; identify consortium members to present the project at selected events.
- 5.4.3 Alignment of public awareness activities of related projects (e.g. EDIT).
- 5.4.4 Organise public events and talks.
- 5.4.5 Represent BHL-Europe at conferences and special events (responsibilities depend on conference location and theme).

## Task 5.5 – Plan and organise user evaluation activities

- 5.5.1 Put in place Web-based evaluation tools to survey users (to determine target group of the users, country of the users, most interesting content, page views, etc.).
- 5.5.2 Develop online questionnaires to identify user requirements, preferences, experiences, benefits, and un-met needs; document case studies of non-science usage of content.
- 5.5.3 Establishing user testing groups; evaluation of this group using interaction logging.
- 5.5.4 Plan and prepare the two special evaluation periods during the project.

## Milestones<sup>1</sup> and expected result

**Responsibility:** WP5 will led by National Museum Prague. This museum has an experienced team for communications, public relations, and related issues. RBINS supports the alignment with EDIT dissemination and public awareness activities.

M5.1 Agreed dissemination plan (M 6)

M5.2 Review of the 1<sup>st</sup> evaluation report (M 15)

M5.3 Review of the  $2^{nd}$  evaluation report (M 30)

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