WP5 Internet Platform for Cybertaxonomy: tools, sharing, networking, and integration
Lead: FUB-BGBM, Walter Berendsohn

Work package number	5		Start date or starting event:				0	
Activity Type			Other specific activities					
Participant id	CDC	MNHN	UKBH	CSIC-MINCN	UvA	NHN	NNM	
Person-months per participant (presently NOT incl. in-kind):	0	31.5	0	27	3	0	0	
	CBS	FUB-BGBM	NHML	RBGK	SMNS	RBINS	RMCA	NBGB	MIZPAN	IBPAN
	0	91	30	18	18	0	12	0	9	0
	HNHM	CUB	IBSAS	INRA	SMEBD	SP2000	BINRAS	ZINRAS	MO	USNM
	15	18	36	0	0	0	0	0	0	0

Objectives

General: (i) Creation of the Internet Platform for Cybertaxonomy, oriented towards its practical use for revisionary taxonomy, taxonomic biodiversity inventories and monitoring of taxa. (ii) Integration of the participating institutions' biodiversity informatics and IT resources.

Second 18 month period: Continue the development of co-operative processes among the institutions, finalise the modelling of the information domain and the work processes; use the process models to implement a user access interface for existing taxonomic tools. Describe the functionality and – where possible – provide interfacing routines between different existing tools. Incorporate bibliographic and geographic resource access custom-tailored for taxonomists into the platform.

Description of work

5.1 Integration of Information Science and Technology (IST) departments; over-all WP5 coordination

5.1.1 Liaison with Board of Directors and Scientific Advisory Committee (SAC).

5.1.2 Finishing and updating the documentation of collaborating Information Science & Technology (IST) departments.

5.1.3 Information Science & Technology Committee (ISTC).

5.1.4 Management, coordination and liaison with other Work Packages (WPs).

5.1.5 Promote scientific standards and standard tools.

5.2 Creating the Internet Platform for Cybertaxonomy

5.2.1 Modelling for Revisionary Taxonomy.

5.2.2 Modelling for taxonomic inventories and modelling.

5.2.3 Define technical interfaces.

5.2.4 (Deferred to 5.7). Identify suitable communication tools as platform components.

5.2.5 (Deferred to 5.6). Identify suitable descriptive tools as platform components.

5.2.6 Implementation activities: Revisionary Taxonomy.

5.2.7 Implementation activities: ATBI's and Monitoring.

5.2.8 Designing the Platform Architecture.

5.3 Virtual Library of Taxonomic Literature and Documentation as a platform component

5.3.1 Survey of current practice and requirements, and agreement on standards.

5.3.2 Software review and recommendations.

5.3.3 Development of registry (resource catalogue).

5.3.4 (Deprecated & included in 5.3.2 & 5.3.6) Planning and implementation of repository.

5.3.5 Intellectual Property Rights (IPR).

5.3.6. Interface development and implementation.

5.4 Geographical platform components

5.4.1 Access to resources.

5.4.2 Provision of output-oriented tools for Revisionary Taxonomy.

5.4.3 Predictive distribution modelling.

5.4.4 Gap Analysis.

5.4.5 Trials and user documentation.

5.5 Taxonomic-core platform components

5.5.1 Identify suitable taxonomic tools as platform components.

5.5.2 Define the taxonomic exchange standard specification.

5.5.3 Testing of taxonomic database components.

5.6 Descriptive and identification platform components

5.6.1 Identify descriptive tools and define criteria.

5.6.2 Testing of descriptive and identification components.

5.6.3 Interact with providers of descriptive and identification components.

5.7 Communication tools as platform components

5.7.1 Identify suitable communication tools.

5.7.2 Create the communication platform.

5.7.3 Setup open review environment.

5.8 Publication support as platform component

5.8.1 Review example documents (tagged monographs) delivered by WP6.

5.8.2 Develop web monograph pilot system.

5.8.3 Specification of data flow within rapid publication platform.

5.8.4 Implement publication data store (preferably based on existing platform components).

5.8.5 Rapid publication platform.

5.9. Specimen access platform component

5.9.1 Define specimen access interface for taxonomists.

5.9.2 Implement access interface for taxonomists.

Deliverables

D5.1 (Formerly D5.1.2.1). Confidential report of internal IST decision making of 50% of EDIT partner institutions (Month 12).

D5.2 (Formerly D5.1.2.2-3). Documentation of internal rules for hardware and software and IST resources of 50% of EDIT partner institutions (Month 12).

D5.3 Confidential report of internal IST decision making of remaining EDIT partner institutions (Month 15).

D5.4 (Formerly D5.1.3.1) Documentation of internal rules for hardware and software and IST resources of remaining EDIT partner institutions (Month 15).

D5.5 Second ISTC meeting (Month 18).

D5.6 At least one MoU announced between EDIT partners (Month 23).

D5.7 A comprehensive EDIT standards list available online (Month 23).

D5.8 (Formerly D5.2.1.2) Operational function model for revisionary taxonomy (Month 16).

D5.9 (Formerly D5.2.2.1) Draft function model and bottleneck report for ATBI+M (Month 14).

D5.10 (Formerly D5.2.2.2) Operational function model for ATBI+M (Month 17).

D5.11 (Formerly D5.5.2.3.1) Draft manual of interface definitions (Month 19).

D5.12 Interface definition manual (Month 23).

D5.13 (Formerly D5.2.7.1) First draft framework for ATBI+M platform established on the web (Month 29)

D5.14 (Formerly D5.2.6.1) First draft framework for rev. taxonomy platform established on the web (Month 29).

D5.15 First draft of the system design (Month 15).

D5.16 Descriptive exchange standard specification report (Month 23).

~~D5.17 Best practice review, including a survey of existing digital library activity, principles and standards (Month 11)~~ Completed Month 12.

D5.18 (Formerly D5.3.1.2) Statement of requirements (Month 13).

D5.19 (Formerly D5.3.1.3) Collection development policy document (Month 15).

D5.20 Standards agreement document (Month 23).

D5.21 Software recommendation based on identifying best matches with the statement of requirements and guarantee future sustainability (Month 19).

D5.22 Access to digitised works by means of simple HTML links on pilot website (Month 23).

D5.23 Use agreements for ViTL available on-line (Month 23).

D5.24 Draft user guideline available (Month 23).

D5.25 Use agreement with publishers of taxonomic revisions for WP6 (Month 24).

D5.26 Requirement analysis report (Month 24).

D5.27 Pilot website available (Month 23).

D5.28 Portal prototype functional for machine access (Month 26).

D5.29 Portal prototype functional for human access (Month 26).

D5.30 Launch of ViTL as a functioning component of the EDIT Platform for Cybertaxonomy including system and user documentation to enable effective access (Month 29).

D5.31 (Formerly D5.4.2) Application for distribution maps (Month 19).

D5.32 eConference on biogeographic representation of biological data with Open GIS (Month 19).

D5.33 (Formerly D5.4.3 & D5.4.4.) eConference on possibilities and drawbacks of modelling techniques (Month 19).

D5.34 Initial report on curator training course (Month 20).

D5.35 Predictive distribution modelling report (Month 21).

D5.36 GIS database of vectorial and raster maps freely available at the European extent (Month 19).

D5.37 Application to examine inventory completeness (Month 25).

D5.38 Gap analysis in local inventories report (Month 25).

D5.39 Application to map inventory completeness (Month 25).

D5.40 Application to select vectorial units by environmental and spatial criteria (ED application) (Month 27).

D5.41 Package instructions, internet download structure and text on statistical considerations with examples (Month 30).

D5.42 (Formerly D5.4.1) Relevant European databases on environmental and biological data HTML compilation and link collection (Month 19).

D5.43 Test data report (Month 25).

D5.44 Taxonomic Database Component evaluation website (Month 14).

D5.45 Report identified and described suitable taxonomic tools (Month 16).

D5.46 Taxonomic exchange standard specification report (Month 18).

D5.47 List (website) of identified and to-be-tested descriptive tools (Month 13).

D5.48 Workshop report on strategy for descriptive data tools as cross-cutting instrument for revisionary

taxonomy (Month 14).
D5.49 First test results in the EDIT review environment (Month 17).
D5.50 Report on integration of descriptive tools into the Platform (Month 26).
D5.51 (Formerly D5.2.4.1) Draft list of suitable communication/ workgroup tools for platform
      environment (Month 12).
D5.52 Open review environment for software tools and resources available. (Month 14).
D5.53 Deliver pilot system software (Month 13).
D5.54 Report of data flow with rapid publication platform (in cooperation with 5.2.8) (Month 17).

Milestones and expected result

M5.1 EDIT certification process introduced at TDWG meeting (Month 17).
M5.2 Report from the 2nd ISTC meeting with first draft work plan for 3rd project period
      (Month 20).
M5.3 (Formerly M5.1.3.3). Platform environment circumscribed based on existing standards and EDIT
certification (Month 25).
M5.4 Interface definition for all data-stores implemented and usable with the platform (Month 29).
M5.5 Function model for revisionary taxonomy with full coverage and operational (Month 14).
M5.6 Function model for ATBI+M with full coverage and operational (Month 17).
M5.7 Interface prototype ratified by the Informatics Commission (Month 20).
M5.8 Pilot and testing (Month 20).
M5.9 Launch ViTL (Month 23).
M5.10 Generic mapping tool (Month 18).
M5.11 Specification for inventory completeness application (Month 24).
M5.12 Specification for mapping tool of completeness (Month 24).
M5.13 Specification for ED application (Month 29).
M5.14 Meeting of experts and public presentation (Month 29).
M5.15 Taxonomic core components available for platform (Month 29).
M5.16 Criteria for descriptive tools agreed and published (Month 15).
M5.17 Review environment populated with revisions of descriptive tools (Month 23).
M5.18 Description and identification components integrated part of platform (Month 29).
M5.19 Communication components available for platform (Month 29).

5.1 Integration of Information Science and Technology (IST) departments; over-all WP5 coordination

Work package number	5	Start date or starting event:		0
Activity Type		Other specific activities		

Objectives
      Build on the documentation efforts of all WP5 activities in order to set EDIT standards, as well
      as discussing these standards with the ISTC and international standardisation bodies.
      Start the EDIT certification process in close collaboration with all partners through the ISTC.
      Initiate MoUs between institutions with IST departments that are part of collaborative activities
      within EDIT (e.g. development of geographical components in WP5.4).

Description of work
5.1.1 Liaison with board of directors and Scientific Advisory Committee (SAC). This is a coordinative function which will be used to provide a focussed connection to the institutional decision makers represented in the board of directors, thus enabling the WP to bypass complex hierarchies where rapid decision making is required. Responsibility for this task needs is assumed by one of the directors

involved in the project; presently the WP5 Leader is a member of the BoD and can thus assume this function.

5.1.2 Finishing and updating the documentation of collaborating Information Science and Technology (IST) departments. The documentation of the internal decision making structures of the participating Information Science and Technology (IST) departments, the documentation of internal provisions, rules and traditions for the acquisition and use of equipment and software; and the documentation of relevant hardware and software resources will be finished with a slight delay from the first year and will be continued as an ongoing task.

5.1.3 Information Science & Technology Committee (ISTC). The Committee is to facilitate the dialogue and collaboration between IST departments and deal with issues such as definition of platform environment, certification of components, and future work-plans. The ISTC is to proceed to become the key body in WP5 proposing procedural changes and adaptations, to ensure interoperability through an infrastructure built on services, and to ensure (as far as possible) compatibility of components to ease replicated installations. During the second year, the development of mechanisms for the certification of EDIT platform components will be central, as well as first formal agreements between institutions defining future collaboration of IST departments.

5.1.4 Management, coordination, and liaison with other Work Packages (WPs). Maintaining the necessary management and coordination structure to manage the WP as to its scientific coordination, liaison with other WPs, the financial processing requirements, a meeting organisation, etc. The organisation of cross-WP workshops of the staff participating in different activities of WP5 is a prerequisite for the success of these.

5.1.5 Promote scientific standards and standard tools. Continue to foment participation in standardising bodies, particularly in Biodiversity Information Standards (TDWG), and to organise the information flow for the provision of input from members to initiatives working on data standards for taxonomy. Pursue a strategy of synergetic development with other initiatives, particularly GBIF and supporting national initiatives.

Deliverables

D5.1 (Formerly D5.1.2.1). Confidential report of internal IST decision making of 50% of EDIT partner institutions (Month 12).

D5.2 (Formerly D5.1.2.2-3). Documentation of internal rules for hardware and software and IST resources of 50% of EDIT partner institutions (Month 12).

D5.3 Confidential report of internal IST decision making of remaining EDIT partner institutions (Month 15).

D5.4 (Formerly D5.1.3.1) Documentation of internal rules for hardware and software and IST resources of remaining EDIT partner institutions (Month 15).

D5.5 Second ISTC meeting (Month 18).

D5.6 At least one MoU announced between EDIT partners (Month 23).

D5.7 A comprehensive EDIT standards list available online (Month 23).

Milestones and expected result

M5.1 EDIT certification process introduced at TDWG meeting (Month 17).

M5.2 Report from the 2nd ISTC meeting with first draft work plan for 3rd project period (Month 20).

M5.3 (Formerly M5.1.3.3). Platform environment circumscribed based on existing standards and EDIT certification (Month 25).

5.2 Creating the Internet Platform for Cybertaxonomy

Work package number	5	Start date or starting event:	0

Activity Type	Other specific activities

Objectives

Modelling, designing and starting the implementation of the Platform, drawing on institutional resources and the ISTC members installed by Activity 5.1 as well as operation-specific resources specified for Activities 5.3 to 5.7.

Provide informal and formal descriptions of the needed and implemented platform components in the Platform. Foresee and/or handle in all components issues such as interoperability (interfacing with other components), internationalisation, accessibility, licensing of commercial software as well as licensing of (open source) software developed in the project.

Identify existing and required new software for taxonomists jointly plan their implementation as components of the shared system.

Commence shared software development for taxonomic research activities as a driver for harmonisation and integration of IST Departments.

Model the platform architecture in light of the results of comparisons of existing and planned components.

Description of work

5.2.1 Modelling for Revisionary Taxonomy. Finalise the in-depth modelling effort of the revisionary work process commenced in year 1. The resulting model (laid out as an UML [Unified Modelling Language] model with different diagram types and accompanying descriptive text) will provide the base for several developments: (i) the ongoing documentation of the changing work process; (ii) the definition of bottlenecks and the documentation of subsequent efforts to remove them; (iii) the interfacing between human work processes and software components and thus (iv) in conjunction with operation 5.2.2 the background for the Internet Platform for Cybertaxonomy itself.

5.2.2 Modelling for taxonomic inventories and monitoring. Continue and finalise the in-depth modelling effort of the work processes in inventories and monitoring activities as delimited by WP7.

5.2.3 Define technical interfaces. Most existing taxonomic applications cover a number of the planned platform components (e.g. core-taxonomic, descriptive, bibliographic, and geographic components). To achieve their integration into the Platform environment as well as interoperability with more specialised software, interfaces have to be defined to make the exchange of data between different components possible and to allow the taxonomist to use functionalities from different programs and components. Successful implementation of a preliminary platform will be reliant on 5.2.3.

5.2.4 (Deferred to 5.7) Identify suitable communication tools as platform components.

5.2.5 (Deferred to 5.6) Identify suitable descriptive tools as platform components.

5.2.6 Implementation activities: Revisionary Taxonomy. Implementation of a prototype of the platform by means of a WWW environment for the collection of tools and resources, following the input given by the modelling process and the needs of WP6. Rapid prototyping approach with direct observation of user feedback. Incorporation of the results of activities 5.3 to 5.8 into the platform environment.

5.2.7 Implementation activities: ATBI's and Monitoring. Review results of ATBI modelling in order to establish software platform specification. Implementation of required hard- and software components such as: field data capture tools, field recording software, authority file support (check-lists, references, ...), associated data-stores (field, base-camp, site/reserve, central), and data interfaces (GBIF, ABCD).

5.2.8 Designing the Platform Architecture. Define and document work and data flow between platform components (see 5.5, 5.6 & 5.7). The system design will be the basis for 5.2.3, 5.2.6 and 5.2.7.

D5.8 (Formerly D5.2.1.2) Operational function model for revisionary taxonomy (Month 16).
D5.9 (Formerly D5.2.2.1) Draft function model and bottleneck report for ATBI+M (Month 14).
D5.10 (Formerly D5.2.2.2) Operational function model for ATBI+M (Month 17).
D5.11 (Formerly D5.5.2.3.1) Draft manual of interface definitions (Month 19).

D5.12 Interface definition manual (Month 23).
D5.13 (Formerly D5.2.7.1) First draft framework for ATBI+M platform established on the web (Month 29)
D5.14 (Formerly D5.2.6.1) First draft framework for rev. taxonomy platform established on the web (Month 29).

Milestones and expected result
M5.4 Interface definition for all data-stores implemented and usable with the platform (Month 29).
M5.5 Function model for revisionary taxonomy with full coverage and operational (Month 14).
M5.6 Function model for ATBI+M with full coverage and operational (Month 17).

5.3 Virtual Library of Taxonomic Literature and Documentation as a platform component

Work package number	5	Start date or starting event:	0
Activity Type		Other specific activities	

Objectives
- Plan, create and implement a web-accessible discovery and access resource to be called European Virtual Library of Taxonomic Literature (EDIT ViTL) as a component of the EDIT Platform for Cybertaxonomy.
- Assess and define the technical and content-related base for revisionary taxonomy and taxonomic inventories, initiate repository development and IPR negotiations in close linkage with activities 5.2.1 and 5.2.2. & WPs 6 and 7.

Description of work
5.3.1 Survey of current practice and requirements, and agreements on standards. Finalising the survey of existing digital library activity, principles and standards, current practice and requirements for agreements and standards. Collection development policy (what will be included and excluded based on identified user requirements, also in collaboration with the modelling under 5.2.1). Agreement on technical and metadata standards to be followed.
5.3.2 Software review and recommendations on choices that provide the most effective match with user requirements and a plan for sustainability.
5.3.3 Development of registry (resource catalogue). Content development for the shared metadata system that indicates which works have already been digitized and for which there is an intention to digitize.
5.3.4 (Deprecated & included in 5.3.2 & 5.3.6) Planning and implementation of repository.
5.3.5 Intellectual Property Rights (IPR). Develop a set of use agreements and/or licences with suppliers (preferably based on the Conservation Commons Licence). Formulate user guidelines for working out copyright. Support for WP6 and WP7 rights management
5.3.6 Interface development and implementation. Requirements analysis for ViTL interfaces in collaboration with operation 5.2.3. Plan and implement a pilot ViTL website for preliminary results and feedback. Implementation of federated searching for digitised taxonomic literature across distributed content providers, including tools for both bibliographical and taxonomic citations.

Deliverables
D5.15 First draft of the system design (Month 15).
D5.16 Descriptive exchange standard specification report (Month 23).
~~D5.17 Best practice review, including a survey of existing digital library activity, principles and standards (Month 11)~~ Completed Month 12.
D5.18 (Formerly D5.3.1.2) Statement of requirements (Month 13).

D5.19 (Formerly D5.3.1.3) Collection development policy document (Month 15).
D5.20 Standards agreement document (Month 23).
D5.21 Software recommendation based on identifying best matches with the statement of requirements and guarantee future sustainability (Month 19).
D5.22 Access to digitised works by means of simple HTML links on pilot website (Month 23).
D5.23 Use agreements for ViTL available on-line (Month 23).
D5.24 Draft user guideline available (Month 23).
D5.25 Use agreement with publishers of taxonomic revisions for WP6 (Month 24).
D5.26 Requirement analysis report (Month 24).
D5.27 Pilot website available (Month 23).
D5.28 Portal prototype functional for machine access (Month 26).
D5.29 Portal prototype functional for human access (Month 26).
D5.30 Launch of ViTL as a functioning component of the EDIT Platform for Cybertaxonomy including system and user documentation to enable effective access (Month 29).

Milestones and expected result
M5.7 Interface prototype ratified by the Informatics Commission (Month 20).
M5.8 Pilot and testing (Month 20).
M5.9 Launch ViTL (Month 23).

5.4 Geographical platform components

Work package number	5	Start date or starting event:	0
Activity Type		Other specific activities	

Objectives
To provide a generic and open source software solution (based on the *Biogeo Plugin* developed with *Q-GIS*) for the Internet Platform for Cybertaxonomy and to use this as the base for specific tools to
    provide output for printed and on-line taxonomic publications
    visualize distributional information
    statistically analyse distributional information with regard to completeness of surveys
    identify gaps to prioritise surveys in order to obtain an unbiased set of data for environmental analysis.

Description of work
5.4.1 Access to resources. Further integrate the results from SYNTHESYS Networking activity D into the preliminary internet platform. Integrate additional resources in the catalogue in order to overlay biological data with different types of vector maps (countries, regions, grid squares, etc), based on the needs identified in operations 5.2.1 and 5.2.2 (modelling of the work processes) and on the needs expressed by WP6 and WP7. Identify resources (technical and data) of other partners in the consortium and beyond through liaison with the ISTC. Initial compilation of material for taxonomist, experts and curator training course (interaction with WP8) and dissemination of results.
5.4.2 Provision of output-oriented tools for Revisionary Taxonomy. Further develop the generic, open source software tool for species distribution mapping based on user-specified maps, point or grid coordinate system, formatting options, and geographic data in collaboration with WP7. Further develop the Biogeo Plugin (see http://radim.freehostia.com/) under the EDIT umbrella in order to incorporate complex requests of database sources and mapping several species maps at the same time.
5.4.3 Predictive distribution modelling. Publication on the EDIT website and continuous enhancements to the bibliography on predictive modelling techniques and the preliminary report on techniques to predict species distributions. Develop a preliminary report on the needs and characteristics

of complete software able to accomplish predictive models. Organise an eConference on predictive modelling techniques.

5.4.4 Gap Analysis. Identification of geographic gaps in - and completeness of - local inventories. Publish and continue to enhance the bibliography on the sampling effort problem and on useful software applications. Studying the source code of existing utilities to include them in the Biogeo application in order to examine the completeness of inventories for specific areas. Integrate additional mapping applications in order to visualize the geographical location of units (countries, regions, grid squares, etc) according to their completeness, and to recognize those insufficiently surveyed. Incorporate an application to select units (countries, regions, grid squares, etc) according to their spatial location and environmental characteristics, in order to obtain minimum numbers of units able to adequately represent the environmental and spatial heterogeneity of an area (ED applications).

5.4.5 Trials and user documentation. Compile test data. Software installation and testing. Bug reports to software developers and user documentation on website.

Deliverables

D5.31 (Formerly D5.4.2) Application for distribution maps (Month 19).

D5.32 eConference on biogeographic representation of biological data with Open GIS (Month 19).

D5.33 (Formerly D5.4.3 & D5.4.4) eConference on possibilities and drawbacks of modelling techniques (Month 19).

D5.34 Initial report on curator training course (Month 20).

D5.35 Predictive distribution modelling report (Month 21).

D5.36 GIS database of vectorial and raster maps freely available at the European extent (Month 19).

D5.37 Application to examine inventory completeness (Month 25).

D5.38 Gap analysis in local inventories report (Month 25).

D5.39 Application to map inventory completeness (Month 25).

D5.40 Application to select vectorial units by environmental and spatial criteria (ED application) (Month 27).

D5.41 Package instructions, internet download structure and text on statistical considerations with examples (Month 30).

D5.42 (Formerly D5.4.1) Relevant European databases on environmental and biological data HTML compilation and link collection (Month 19).

D5.43 Test data report (Month 25).

Milestones and expected result

M5.10 Generic mapping tool (Month 19).

M5.11 Specification for inventory completeness application (Month 25).

M5.12 Specification for mapping tool of completeness (Month 25).

M5.13 Specification for ED application (Month 30).

M5.14 Meeting of experts and public presentation (Month 30).

5.5 Taxonomic-core platform components

Work package number	5	Start date or starting event:	12
Activity Type		Other specific activities	

Objectives

Assess taxonomic database systems in current use based on the taxonomic modelling effort in 5.2 and the requirements formulated by WPs 3, 6 & 7.

Collaborate with WP6 in order to establish interfaces for import, export, warehousing and publishing.

Develop solutions for the persistence and longevity of data availability.

Description of work

The specification of technical interfaces is covered by operation 5.2.3, the implementation of these interfaces by 5.2.6 and 5.2.7.

5.5.1 Identify suitable taxonomic tools as platform components.

5.5.2 Define the taxonomic exchange standard specification. Elaboration of an extended specification based on TCS (the TDWG Taxon Concept Schema) in agreement with 5.2.3 (interfaces) and 5.1.5 (standards)

5.5.3 Testing of taxonomic database components. Using the model taxon group's data, the functionality of the potential components (e.g. TCS, Berlin Model, Pandora, BibMaster, OSF, CATE, Prometheus, etc.) will be tested and the results documented.

(WP6 NHML included in operation & BGBM 3 pm).

Deliverables

D5.44 Taxonomic Database Component evaluation website (Month 14).

D5.45 Report identified and described suitable taxonomic tools (Month 16).

D5.46 Taxonomic exchange standard specification report (Month 18).

Milestones and expected result

M5.15 Taxonomic core components available for platform (Month 29).

5.6 Descriptive and identification platform components

Work package number	5	Start date or starting event:	12
Activity Type		Other specific activities	

Objectives

Assess the available and supported descriptive tools for taxonomists.

Establish an integrated descriptive component platform that uses standards compliant to phyloinformatic (WP3) and morphometric tools (WP4).

Improve selected tools by implementing standard interfaces.

Description of work

The specification of technical interfaces is covered by the MNHN-UPMC under operation 5.2.3, the implementation of these interfaces under 5.2.6 and 5.2.7.

5.6.1 Identify descriptive tools and define criteria for their description and assessment as platform components, including a workshop.

5.6.2 Testing of descriptive and identification components. Test the tools with different groups of organisms, preferably in the realm of model taxa. Formulate test results, contact tool providers for their feedback, publish test results in an ongoing manner within the EDIT review environment (5.7) website and react to community feedback. Actively disseminate the results in the EDIT community.

5.6.3 Interact with providers of descriptive and identification components to achieve the implementation of changes necessary for proper interfacing and incorporation into the platform.

Deliverables

D5.47 List (website) of identified and to-be-tested descriptive tools (Month 14).

D5.48 Workshop report on strategy for descriptive data tools as cross-cutting instrument for revisionary taxonomy (Month 14).

D5.49 First test results in the EDIT review environment (Month 17).

D5.50 Report on integration of descriptive tools into the Platform (Month 26).

Milestones and expected result
M5.16 Criteria for descriptive tools agreed and published (Month 15). M5.17 Review environment populated with revisions of descriptive tools (Month 23). M5.18 Description and identification components integrated part of platform (Month 29).

5.7 Communication tools as platform components

Work package number	5	Start date or starting event:		9
Activity Type		Other specific activities		

Objectives
Fully integrate communication components adapted to taxonomists' needs into the Internet Platform for Cybertaxonomy. Provide the other component activities with a review environment.

Description of work
5.7.1 Identify suitable communication tools as platform components. This task has essentially been finished by Month 11, but will be continued as new technological solutions become available. **5.7.2 Create the communication platform** based on user-defined and selected components. **5.7.3 Setup open review environment** for software tools and resources.

Deliverables
D5.51 (Formerly D5.2.4.1) Draft list of suitable communication/ workgroup tools for platform environment (Month 12). D5.52 Open review environment for software tools and resources available. (Month 14).

Milestones and expected result
M5.19 Communication components available for platform (Month 29).

5.8 Publication support as a platform component

Work package number	5	Start date or starting event:		12
Activity Type		Other specific activities		

Objectives
Erect a structure to support online and print publications for taxonomic data. Work closely with WP6 and other related projects or efforts.

Description of work
5.8.1 Review example documents (tagged monographs) delivered by WP6. **5.8.2 Develop web monograph pilot system.** **5.8.3 Specification of data flow within rapid publication platform.** **5.8.4 Implement publication data store (preferably based on existing platform components).** **5.8.5 Rapid publication platform.**

Deliverables
D5.53 Deliver pilot system software (Month 13). D5.54 Report of data flow with rapid publication platform (in cooperation with 5.2.8) (Month 17).

Milestones and expected result
None.

5.9 Specimen access as a platform component

Work package number	5	Start date or starting event:	12
Activity Type		Other specific activities	

Objectives
Integrate specimen access according to taxonomist's needs into the Platform

Description of work
5.9.1 Define specimen access interface for taxonomists.
5.9.2 Implement access interface for taxonomists.

Deliverables
None.

Milestones and expected result
None

	Deliverables list Joint programme of activities (18 months period, month 11 - 29)						
Del. No.[1]	Deliverable name	WP no.	Lead particip-ant	Estimated indicative person months	Nature[2]	Dissemination level[3]	Delivery date[4] (proj. month)
D5.1 (Formerly D5.1.2.1).	Confidential report of internal IST decision making of 50% of EDIT partner institutions	WP 5	14 RCMA	3	R	CO	Month 12
D5.2 (Formerly D5.1.2.2-3).	Documentation of internal rules for hardware and software and IST resources of 50% of EDIT partner institutions	WP5	14 RCMA	3	R	CO	Month 12
D5.3	Confidential report of internal IST decision making of remaining EDIT partner institutions	WP5	9 FUB-BGBM	3,5	R	CO	Month 15
D5.4 (Formerly D5.1.3.1)	Documentation of internal rules for hardware and software and IST resources of remaining EDIT partner institutions	WP5	9 FUB-BGBM	4	R/Database	CO	Month 15
D5.5	D5.5 Second ISTC meeting	WP5	9 FUB-BGBM	6	R	RE	Month 18
D5.6	At least one MoU announced between EDIT partners	WP5	9 FUB-BGBM	6	R	RE	Month 23
D5.7	A comprehensive EDIT standards list available online	WP5	9 FUB-BGBM	20	O/Database	RE	Month 23

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[1] Deliverable numbers in order of delivery dates: D1 – Dn

[2] Please indicate the nature of the deliverable using one of the following codes:
  R = Report
  P = Prototype
  D = Demonstrator
  O = Other

[3] Please indicate the dissemination level using one of the following codes:
  PU = Public
  PP = Restricted to other programme participants (including the Commission Services).
  RE = Restricted to a group specified by the consortium (including the Commission Services).
  CO = Confidential, only for members of the consortium (including the Commission Services).

[4] Month in which the deliverables will be available. Month 1 marking the start of the project, and all delivery dates being relative to this start date.

Del. No.	Deliverable name	WP no.	Lead particip-ant	Estimated indicative person months	Nature	Dissemination level	Delivery date (proj. month)
D5.8 (Formerly D5.2.1.2)	Operational function model for revisionary taxonomy	WP5	11 RBGK	2	Model/R	RE	Month 16
D5.9 (Formerly D5.2.2.1)	Draft function model and bottleneck report for ATBI+M	WP5	18 HNHM	1	R	RE	Month 14
D5.10 (Formerly D5.2.2.2)	Operational function model for ATBI+M	WP5	18 HNHM	5	Model/R	RE	Month 17
D5.11 (Formerly D5.5.2.3.1)	Draft manual of interface definitions	WP5	9 FUB-BGBM	7	O/Software	RE	Month 19
D5.12	Interface definition manual	WP5	9 FUB-BGBM	19	R	RE	Month 23
D5.13 (Formerly D5.2.7.1)	First draft framework for ATBI+M platform established on the web	WP5	18 HNHM	10	Model/R	RE	Month 29
D5.14 (Formerly D5.2.6.1)	First draft framework for rev. taxonomy platform established on the web	WP5	11 RBGK	10	Model/R	RE	Month 29
D5.15	First draft of the system design	WP5	10 NHML	3	Model/R	RE	Month 15
D5.16	Descriptive exchange standard specification report	WP5	10 NHML	12	R	RE	Month 23
~~D5.17~~	~~Best practice review including a survey of existing digital library activity principles and standards~~	~~WP5~~	~~10 NHML~~	~~1~~	~~R~~	~~RE~~	~~Month 11~~ Delivered Month 12
D5.18 (Formerly D5.3.1.2)	Statement of requirements	WP5	10 NHML	2	R	RE	Month 13
D5.19 (Formerly D5.3.1.3)	Collection development policy document	WP5	10 NHML	3	R	RE	Month 15

Del. No.	Deliverable name	WP no.	Lead particip-ant	Estimated indicative person months	Nature	Dissemination level	Delivery date (proj. month)
D5.20	Standards agreement document	WP5	10 NHML	3,2	R	RE	Month 23
D5.21	Software recommendation based on identifying best matches with the statement of requirements and guarantee future sustainability	WP5	10 NHML	5	R/Database	RE	Month 19
D5.22	Access to digitised works by means of simple HTML links on pilot website	WP5	10 NHML	4	O/Database	RE	Month 23
D5.23	Use agreements for ViTL available on-line	WP5	10 NHML	4	R/Database	RE	Month 23
D5.24	Draft user guideline available	WP5	10 NHML	4	R	RE	Month 23
D5.25	Use agreement with publishers of taxonomic revisions for WP6	WP5	10 NHML	2	R	RE	Month 24
D5.26	Requirement analysis report	WP5	10 NHML	4	R	RE	Month 24
D5.27	Pilot website available	WP5	10 NHML	4	O/Website	RE	Month 23
D5.28	Portal prototype functional for machine access	WP5	10 NHML	5	O/Software	RE	Month 26
D5.29	Portal prototype functional for human access	WP5	10 NHML	5	O/Software	RE	Month 26
D5.30	Launch of ViTL as a functioning component of the EDIT Platform for Cybertaxonomy including system and user documentation to enable effective access	WP5	10 NHML	10	O/Software	RE	Month 29
D5.31 (Formerly D5.4.2)	Application for distribution maps	WP5	4 CSIC-MINCN	3	D	RE	Month 19
D5.32	eConference on biogeographic representation of biological data with Open GIS	WP5	14 RMCA	0,5	R/Meeting	RE	Month 19

Del. No.	Deliverable name	WP no.	Lead particip-ant	Estimated indicative person months	Nature	Dissemi nation level	Delivery date (proj. month)
D5.33 (Formerly D5.4.3 & D5.4.4)	eConference on possibilities and drawbacks of modelling techniques	WP5	4 CSIC-MINCN & 16 MIZPAN	0,5	R/Meeting	RE	Month 19
D5.34	Initial report on curator training course	WP5	14 RMCA	4	R	RE	Month 20
D5.35	Predictive distribution modelling report	WP5	4 CSIC-MINCN & 16 MIZPAN	5	R	RE	Month 21
D5.36	GIS database of vectorial and raster maps freely available at the European extent	WP5	4 CSIC-MINCN	4	O/Software	RE	Month 19
D5.37	Application to examine inventory completeness	WP5	4 CSIC-MINCN	12	O/Software	RE	Month 25
D5.38	Gap analysis in local inventories report	WP5	4 CSIC-MINCN	12	R	RE	Month 25
D5.39	Application to map inventory completeness	WP5	4 CSIC-MINCN	10	O/Software	RE	Month 25
D5.40	Application to select vectorial units by environmental and spatial criteria (ED application)	WP5	4 CSIC-MINCN	18	O/Software	RE	Month 27
D5.41	Package instructions internet download structure and text on statistical considerations with examples	WP5	4 CSIC-MINCN	10	R/Website	RE	Month 29
D5.42 (Formerly D5.4.1)	Relevant European databases on environmental and biological data HTML compilation and link collection	WP5	4 CSIC-MINCN	5	O/Database	RE	Month 19
D5.43	Test data report	WP5	16 MIZPAN & 18 HNHM	8	R	RE	Month 25
D5.44	Taxonomic Database Component evaluation website	WP5	9 FUB-BGBM	2	O/Database	RE	Month 14
D5.45	Report identified and described suitable taxonomic tools	WP5	9 FUB-BGBM	4	R	RE	Month 16

Del. No.	Deliverable name	WP no.	Lead particip-ant	Estimated indicative person months	Nature	Dissemination level	Delivery date (proj. month)
D5.46	Taxonomic exchange standard specification report	WP5	9 FUB-BGBM	6	R	RE	Month 18
D5.47	List (website) of identified and to-be-tested descriptive tools	WP5	2 MNHN	2	R/Website	RE	Month 13
D5.48	Workshop report on strategy for descriptive data tools as cross-cutting instrument for revisionary taxonomy	WP5	2 MNHN	0,5	R	RE	Month 14
D5.49	First test results in the EDIT review environment	WP5	2 MNHN	5	R	RE	Month 17
D5.50	Report on integration of descriptive tools into the Platform	WP5	2 MNHN	12	R	RE	Month 26
D5.51 (Formerly D5.2.4.1)	Draft list of suitable communication/workgroup tools for platform environment	WP5	9 FUB-BGBM	1	R	RE	Month 12
D5.52	Open review environment for software tools and resources available	WP5	9 FUB-BGBM	2	R/Website	RE	Month 14
D5.53	Deliver pilot system software	WP5	9 FUB-BGBM	2	O/Software	RE	Month 13
D5.54	Report of data flow with rapid publication platform (in cooperation with 5.2.8)	WP5	9 FUB-BGBM	6	R	RE	Month 17