



Project no. 018340

Project acronym: EDIT

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Instrument: Network of Excellence

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Third Joint Programme of Activities (Month 24 to Month 41)

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Project coordinator organisation name: Muséum National d’Histoire Naturelle (MNHN)

Revision 1

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Section 1: Introduction – General description

In EDIT's second year, activities have developed along two lines: one following development of common research activities and products for research (inventories, cybertaxonomy tools and infrastructures, training, research projects funded externally), and the other developing the process of integration itself and preparing the formal instruments of the latter (Vision, Roadmap, MoUs, legal status, meetings, infrastructures integration). As described in the PAR, considerable effort has been produced following the advices from both the Scientific Advisory Council and the European Commission.

The third JPA corresponds essentially to the consolidation and further development of the activities and products of the 2nd reporting period. It starts implementing some of the plans elaborated in the second period and delivers more outputs, making available and visible more of the products which have been elaborated in the first two periods. Regarding EDIT activities internal functioning, interworkpackage integration is the object of specific plans.

Common orientation of research will be explored, following the lines established by the Future Scoping Group report, by a newly established Science policy group, in parallel with liaison and integration of existing research activities, and exploration of synergies including for research publishing activities.

The integration process will be developed through the activities of the coordination workpackages:

- further development of the institutional process through further exploration of the possible legal and organisational modalities, including elaboration of more MoUs;
- establishment of supporting mechanisms for visits of staff and students from and into EDIT institutions
- elaboration of the design for integrated physical infrastructures
- gap analysis of the expert resources in EDIT
- update of the roadmap

Regarding interactions of the taxonomic community:

- modalities of interaction with amateurs and taxonomic networks will be further explored.
- the PR and communication plan will be implemented, and participation in events outside EDIT will be pursued;
- preparation of Biodiversity Year Special Events (BYSE), which is at the core of PA activities, will start;
- a third general meeting will take place by the end of the JPA, back to back with the BoD and SAC meetings, and the possibility to Organise simultaneously a second Science Symposium will be explored.

Regarding products, in the 3rd JPA, informatics modelling and design led formerly will result in progressive release of the common data model and functional components of the internet platform for cybertaxonomy:

- portals for virtual library, GIS tools (Geographical Information Systems), taxonomic editor, CDM interface (Common Data Model), specimen access will provide tools, in addition to the present WP pages;

- outputs from the “production” workpackages (inventories, revisions, training resources and schemes) will be progressively integrated, making visible the central function of the platform. The scratchpads and the outputs of ATBI + Ms will be integrated into the platform, in parallel to further development of communities of users;
- the information system on expert and expertise first version will become operational for activities presently developed (revisions, inventories), and will start its function as a management tool for expert resources through gap analysis of EDIT' expert work force. Furthermore new ATBI + M sites will be established, and work will start on sustainability of the ATBI + M processes.

Regarding infrastructures beyond EDIT, a funding proposal for coordinated barcoding activity in Europe, building on the 2007 symposium, will be submitted. EDIT will contribute to stable pan-European and global names infrastructures, and will establish MoUs defining modalities of collaboration with international distributed infrastructures (eg GBIF,etc).

Finally training activities will be developed through:

- further development of the online catalogue of training resources
- summer schools
- the expert-in-training programme
- and elaboration of the course prospectus for the Distributed European School of Taxonomy.

Section 2: Workpackage descriptions

2.1 Workpackage 1: EDIT Coordination and Management

Leader: MNHN, Simon Tillier

Work package number		1		Start date or starting event:				0		
Activity Type				Other specific activities						
Participant id				CDC	MNHN	UKBH	CSIC-MNCN	UvA	NHN	NNM
Person-months per participant:				9	82,7	3,55	3,85	1,25	0,9	3,55
CBS	FUB-BGBM	NHML	RBGK	SMNS	RBINS	RMCA	NBGB	MIZPA N	IBPAN	
1	3,85	3,85	3,4	3,75	10,85	0,8	0,8	0,8	0,8	
HNHM	CUB	IBSAS	INRA	SMEBD	SP2000	BINRAS	ZINRAS	MO	USNM	MfN
0,8	0,8	0,8	0,8	0,8	0,8	0,8	0,8	0,8	0,8	1,25

Objectives

- Build up and operate a light but dynamic structure, involving the top executive level of the partners, ensuring long-term operational and structural links between partners
- Coordinate the activities regarding research, infrastructures and expertise toward common goals integrated at director's level for implementation of further common decisions, aiming at combining all workpackages objectives into a single integrated sustainable structure
- Ensure interaction of EDIT activities with scientific activity in the field of biodiversity and with societal needs
- Coordinate interactions with stakeholders, including communication with institutional stakeholders
- Establish and actualise the roadmap for EDIT, including plans to enlarge the consortium
- Ensure internal and external communication of EDIT, and its visibility through the web

Description of work

- 1.1 Establishment and operation of the administrating structure, incl. coordination of the WPs
- 1.2 Orientation, Sustainability and development of exploitation strategies for EDIT
- 1.3 Communication (internal / external)
- 1.4 Liaison programme coordinating the ad hoc liaison groups established by WPs
- 1.5 Gender Action Plan

Components¹

C1.1.5 Budget for months 24-41 submitted by the NSC to the BoD (Month 25) (April 2008)

¹ Components are not part of the EC Contract n°018340.

C1.1.6 Financial report (Months 29, 35 and 41) (August 2008, February 2009 and August 2009)
 C1.3.1 Improved website (Month 27)
 C1.3.2. Newsletter, bimonthly issues (Months 24, 26, 28, 30, 32, 34, 36, 38, 40)
 C1.3.3 Action plan for promotion of Taxonomy toward decision makers (Month 35)
 C1.5.4 Report on best practice on family friendly conditions of employment (Month 28) (July 2008)

Milestones

M1.1.9 Meeting of the NSC (Month 25) April 2008
 M1.1.10 Meeting of the NSC (Month 27) June 2008
 M1.1.11 Meeting of the NSC (Month 30) September 2008
 M1.1.12 Meeting of the NSC (Month 33) December 2009
 M1.1.13 Meeting of the NSC (Month 36) March 2009
 M1.1.14 Meeting of the NSC (Month 39) June 2009
 M1.2.12 SAC meeting (Month 34) January 2009
 M1.2.13 BoD meeting (Month 34) January 2009
 M1.3.7 General meeting (Month 39) June 2009
 M1.4.4 Report to the Scientific Advisory Council (Month 34) January 2009
 M1.5.1 Gender aspects integrated into EDIT's recruitment strategy (Month 28) (July 2008)

1.1 Establishment and operation of the administrating structure, incl. coordination of the WPs

Work package number	1	Start date or starting event:	0
Activity Type	Other specific activities		

Objectives

- Establish and maintain interaction between the overall objectives of EDIT, the activities of the workpackages, and stakeholders as represented in the Scientific Advisory Council (SAC), in accordance with decisions from the Board of Directors (BoD).

Description of work

1.1.1 Running of the Network Office

The Network Office will Organise the meetings at WP1 level (NSC, SAC, BoD) and monitor the EDIT programme. The Communication Officer will work in close relation with the Network Office.

1.1.2 Operation of the Network Steering Committee

The NSC will meet about every three months, for internal reporting of the WP leaders and examination of the budget and activities of the next three months. It will prepare the next JPA draft in October for submission to the BoD before the end of each reporting period.

Components

C1.1.5 Budget for months 24-41 submitted by the NSC to the BoD (Month 25) (April 2008)
 C1.1.6 Financial report (Months 29, 35 and 41) (August 2008, February 2009 and August 2009)

Milestones

M1.1.9 Meeting of the NSC (Month 25) April 2008
 M1.1.10 Meeting of the NSC (Month 27) June 2008
 M1.1.11 Meeting of the NSC (Month 30) September 2008
 M1.1.12 Meeting of the NSC (Month 33) December 2009
 M1.1.13 Meeting of the NSC (Month 36) March 2009

M1.1.14 Meeting of the NSC (Month 39) June 2009

1.2 Orientation, Sustainability and Development of exploitation strategies for EDIT

Work package number	1	Start date or starting event:	0
Activity Type	Other specific activities		

Objectives

- Orienting EDIT activities according to the users' needs and the possibilities of the partners.
- Establishing the mechanisms allowing sustainability of integration, and sustainable development of activities, beyond the term of the contract.

Description of work

1.2.1 Orientation of EDIT activities

Interaction of the NSC, representing EDIT activities and SAC, which represents stakeholders external the consortium, should lead to proposals on orientations and further actions, which have to be submitted to the BoD who will evaluate their feasibility and make decision on implementation.

1.2.2 EDIT sustainability

Defining and progressing toward EDIT after the present contract. Based upon former reports (stakeholders, Future Scoping Group, Trends in Taxonomy, Users, BoD working group) and further work mainly from the BoD working group(s) and NSC.

1.2.3 Interactions with institutional stakeholders outside EDIT and exploitation strategies

The challenge here is to make both taxonomists inside EDIT, and institutional partners (funding agencies, ministries, etc.) aware of the potential of the EDIT taxonomic force, and make exploitation of this force possible through appropriate funding.

1.2.4 Roadmap for EDIT

Actualisation of the first roadmap (JPA2 deliverable, Month 24) by the Project Leader, NSC, and BoD.

Components

Report on activities, ideas and products that could be continued, or have the potential to exist after the funding period. Depends from the outcomes from 1.2.2 and 1.2.4 above.

Milestones

M1.2.12 SAC meeting (Month 34) January 2009

M1.2.13 BoD meeting (Month 34) January 2009

1.3 Communication

Work package number	1	Start date or starting event:	0
Activity Type	Other specific activities		

Objectives

- Make all EDIT partners aware in real time of progress in the activities
- Provide to all participants an internal forum where activities and directions can be discussed internally
- Make the taxonomic community external to EDIT aware of EDIT activities and encourage its

support and participation

- Promote EDIT and taxonomy in forums dedicated to biodiversity and beyond

Description of work

1.3.1 Establishment and running of the Website

The website will be redesigned through creation of different sections (insiders, professionals and outsiders) and transferred under Drupal, which has been adopted for WPs pages.

1.3.2 Publication of the EDIT Newsletter

The Newsletter will explicitly be refocused toward a core audience of professional taxonomists within EDIT member institutions. Additional printed versions will be produced for distribution to major conferences and deposited in libraries via team leaders.

1.3.3 Participation to meetings and forums to promote taxonomy and EDIT activities for biodiversity and ecosystem research.

1.3.4 PR Coordination

The EDIT profile will be raised through implementation of the PR and communication plan (JPA2 deliverable).

1.3.5 Scientific managers group

Scientific managers group will pursue its informal meetings and exchange of information through their mailing list.

Components

C1.3.1 Improved website (Month 27)

C1.3.2. Newsletter, bimonthly issues (Months 24, 26, 28, 30, 32, 34, 36, 38, 40)

C1.3.3 Action plan for promotion of Taxonomy toward decision makers (Month 35)

Milestones

M1.3.7 General meeting (Month 34) January 2009

1.4 Liaison programme

Work package number	1	Start date or starting event:	3
Activity Type	Other specific activities		

Objectives

- Filter a vision and recommendations (to BoD, SAC and WP leaders) on how to establish Liaison groups in the future.

Description of work

Compile, interpret and disseminate experiences and recommendations of liaison activities in network. This should be filtered from the work in WP2 (amateurs) WP4 (broader user community), WP7 (conservation managers).

Components

The Network Office will follow meetings, conferences etc., will maintain a coordinated directory of participants and will report to the NSC.

Milestones

M1.4.1 Report to the Scientific Advisory Council and to the BoD (Month 34)

1.5 Gender Action Plan

Work package number	1	Start date or starting event:	0
Activity Type	Other specific activities		

Objectives

To promote gender equality in all activities, based upon everyone's involvement, not only women's:

- Gender balance
- Gender awareness for men and women in EDIT
- Promotion of women in science
- Family-friendly policies

Description of work

1.5.1 Work toward achieving gender balance in all activities

Encourage women to participate in the management and scientific committees established within EDIT; gender balance while developing EDIT's integrated recruitment strategy, exchange scheme and training programme.

1.5.2 Raise gender awareness among EDIT participants

Gender awareness liaison group to encourage networking and mentoring amongst women researchers. Gender in science will be the subject of a special thematic session during the first network-side workshop. In addition, it will be investigated whether "Gender Aspects in Taxonomy" can be made a topic of research. The issue of a gendered approach to biodiversity informatics (e.g. in the development or use of software) will be covered. EDIT will invite experts on these questions and will provide a report on the results.

1.5.3 Promote women in science

Women will be encouraged to give keynote talks at conferences and workshops in the project. As part of a mentoring scheme, senior women scientists of EDIT will provide role models for young researchers. Senior male colleagues involved in higher management functions (e.g. directors of institutes) will also be asked to share their experience. A few short fellowships will be provided each year for outstanding women scientists. The main aim is to foster permanent structural change through knowledge. Links will be established with networks of women scientists and contacts will be sustained with persons in charge of gender action plans of other FP6 projects, in order to exchange experiences.

1.5.4 Consider family-friendly policies

EDIT will make provisions for Work/Life Balance travel grants for scientists with babies or toddlers up to 3 years age. When possible, EDIT will support service for crèche care at the meeting or training places of the project. EDIT will consider adapting timetables to make research conferences, training sessions and workshops more family friendly, such as enabling participants to return from such meeting on a Friday or Saturday morning rather than a Sunday.

EDIT will carry out a comparative review of employment regulations and practices relating to family friendly issues amongst the partners with the intention of then promoting best practice across the network.

Components

C1.5.4 Report on best practice on family friendly conditions of employment (Month 28) (July 2008)

Milestones and expected result

M1.5.1 Gender aspects integrated into EDIT's recruitment strategy (Month 28) (July 2008)

2.2 Workpackage 2: Integrating and Reshaping the Expert and Expertise Basis

Leader: UKBH, Henrik Enghoff

Work package number		2		Start date or starting event:				0		
Activity Type				Other specific activities						
Participant id				CDC	MNHN	UKBH	CSIC-MNCN	UvA	NHN	NNM
Person-months per participant:				0	2	16	5	1	4	2,5
CBS	FUB-BGBM	NHML	RBGK	SMNS	RBINS	RMCA	NBGB	MIZPAN	IBPAN	
0,5	1,5	1	1,5	2	1,5	1,3	0,5	0,5	0	
HNHM	CUB	IBSAS	INRA	SMEBD	SP2000	BINRAS	ZINRAS	MO	USNM	MfN
0	3	1	3	1	1	3	0	0	0,3	1

Objectives

- Providing an efficient online information service on European Taxonomic experts, their expertise and ongoing and planned taxonomic research projects
- Involving non-professional taxonomists in an integrated European Taxonomic workforce, i.a., through taxonomic societies
- Promoting integration of taxonomic networks and research teams within and beyond EDIT
- Facilitating exchange of researchers among EDIT partners
- Coordinating activities in WP2 with other workpackages to maximise benefit and minimise duplication of effort.
- Defining areas of responsibility within an overall EDIT strategy.

Description of work

2.0 Integration with other workpackages

2.1 Information service on taxonomic experts, their expertise and ongoing and planned taxonomic research projects

(2.2. now included in 2.1)

2.3 Involving non-professional taxonomists, taxonomic societies and networks

2.4 Supporting new joint research among EDIT partners through exchange of researchers

Components

C2.0.1 Areas of responsibility outlined and made available on EDIT website (Month 35)

C2.1.3 First version of the online expert information service (Month 26).

C2.1.4 Data on EDIT partner taxonomic experts entered in information service (Month 31)

C2.1.5 Test data from test country/ies entered in information service (Month 33)

C2.1.6 Data on experts associated with first batch of ATBI+M's entered in information service (Month 33)

C2.1.7 Data on experts associated with first batch of demonstrator group activities entered in information service (Month 33)
 C2.1.8 Gap analysis on taxonomic expertise in EDIT (Month 35)
 C2.3.2 Second version of the online information service on societies and networks (Month 29)
 C2.3.3 Report on guidelines on how to meet mutual needs of non-professional and professional taxonomists (Month 28)
 C2.4.2 Description of criteria for and mechanism of support for staff exchange (Month 24)
 C2.4.3 Implementation of mechanism of support for staff exchange (Month 25)

Milestones

M2.0.1 Plan for collaboration with WP3 established (Month 30)
 M2.0.2 Plan for collaboration with WP4 established (Month 30)
 M2.0.3 Plan for collaboration with WP5 established (Month 30)
 M2.0.4 Plan for collaboration with WP6 established (Month 30)
 M2.0.5 Plan for collaboration with WP7 established (Month 30)
 M2.0.6 Plan for collaboration with WP8 established (Month 30)
 M2.1.3 Responses received from selected users with suggestions for the second version of the information service (Month 35)
 M2.1.4 Adoption by BoD of information service as the system for EDIT institutions to catalogue their human taxonomic resources. (Month 33).
 M2.3.2 Workshop for invited representatives of larger pan-European/international taxonomic societies with emphasis on synergies/conflicts between amateur and professional taxonomists, in collaboration with WP4 (Month 25)
 M2.3.3 Symposium for existing taxonomic networks (Month 32)
 M2.4.3 First call for applications to grant for exchange of researchers (Month 25)

2.0 Integration with other workpackages

Work package number	2	Start date or starting event:	12
Activity Type	Other specific activities		
Objectives			
<ul style="list-style-type: none"> • Coordinate activities in WP2 with other workpackages to maximise benefit and minimise duplication of effort. • Define areas of responsibility within an overall EDIT strategy. 			

Description of work

2.0.1 To engage with WP3 over possible models for sustainability of pan-European taxonomic databases, and other areas of mutual interest
2.0.2 To engage with WP4 over inclusion of approaches to taxonomic research in information service, clarify users' needs of taxonomy, and other areas of mutual interest
2.0.3 To engage with WP5 over relation between WP2 information services and WP5 platform for cybertaxonomy, and other areas of mutual interest
2.0.4 To engage with WP6 over the formation of taxonomic communities, inclusion of data on WP6 model group taskforces in WP2 information service, and other areas of mutual interest
2.0.5 To engage with WP7 over the formation of taskforces for ATBI+M, inclusion of data on these taskforces in WP2 information service, and other areas of mutual interest
2.0.6 To engage with WP8 over relation between WP8 database on taxonomic training resources and WP2 information service
2.0.7 General workpackage and EDIT partner coordination

Components

C2.0.1 Areas of responsibility outlined and made available on EDIT website (Month 35)

Milestones and expected result

M2.0.1 To establish a common work plan with WP3 (Month 30)

M2.0.2 To establish a common work plan with WP4 (Month 30)

M2.0.3 To establish a common work plan with WP5 (Month 30)

M2.0.4 To establish a common work plan with WP6 (Month 30)

M2.0.5 To establish a common work plan with WP7 (Month 30)

M2.0.6 To establish a common work plan with WP8 (Month 30)

2.1 Information service on taxonomic experts, their expertise and ongoing and planned taxonomic research projects

Work package number	2	Start date or starting event:	0
Activity Type	Other specific activities		

Objectives

- Providing an efficient online information service on European taxonomic experts, their expertise and ongoing and planned taxonomic research projects. The information service is for internal as well as external use, but it will be designed (and content collected) with high priority on meeting the needs for information by EDIT partners regarding:
 - Provision of a better knowledge base for an integrated recruitment strategy in EDIT
 - Taxonomic information backbone and pan-European checklist activities of WP3
 - Coordination of research organised by WP4 (especially regarding methodology)
 - Formation of networks, committees and task forces for WP6 and WP7 activities
 - WP8's assessment of training resources for taxonomy in Europe
- Priorities for content:
1. EDIT partners' expertise and projects
 2. Exemplar data to test structural, sociological and legal constraints
 3. Expertise and projects in demonstrator groups identified by WP6 and in ATBI+M areas identified by WP7.
 4. Coverage of all major taxa (within and beyond EDIT)
- Integrating the information service in the EDIT internet platform for cybertaxonomy (WP5)
 - Integration the information service with WP8 information on training

Description of work**2.1.1** (done)

2.1.2 Development of an online, searchable information service on taxonomic experts, their expertise, and ongoing and planned taxonomic projects, according to taxonomic group, type of taxonomic activity, methodological approach, geographical area and/or main ecosystem type (collaboration with WP5).

2.1.3 Population of the online information service database with data on EDIT partners

2.1.4 Population of the online information service database. Test of structural, sociological and legal constraints. Test country/ies to be identified.

2.1.5 Population of the online information service database with data on taxonomists engaged in EDIT ATBI+M activities.

2.1.6 Population of the online information service database with data on taxonomists engaged in EDIT demonstrator group activities.

2.1.7 Interaction with WP8 database of taxonomic teachers and training courses.
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Components

- | |
|--|
| <p>C2.1.3 First version of the online information service (Month 26).</p> <p>C2.1.4 Data on EDIT partner taxonomic experts entered in information service (Month 31)</p> <p>C2.1.5 Test data from test country/ies entered in information service (Month 33)</p> <p>C2.1.6 Data on experts associated with first batch of ATBI+M's entered in information service (Month 33)</p> <p>C2.1.7 Data on experts associated with first batch of demonstrator group activities entered in information service (Month 33)</p> <p>C2.1.8 Gap analysis on taxonomic expertise in EDIT (Month 35)</p> |
|--|

Milestones and expected result

- | |
|---|
| <p>M2.1.3 Responses received from selected users with suggestions for the second version of the information service (Month 35)</p> <p>M2.1.4 Adoption by BoD of information service as the system for EDIT institutions to catalogue their human taxonomic resources. (Month 33).</p> |
|---|

2.3 Involving non-professional taxonomists, taxonomic societies and networks

Work package number	2	Start date or starting event:	0
Activity Type	Other specific activities		

Objectives

- | |
|--|
| <ul style="list-style-type: none"> Involving non-professional taxonomists in an integrated European Taxonomic workforce, i.a., through taxonomic societies, in line with recommendation from EDIT's "Future Scoping Group" Promoting integration of taxonomic networks and research teams within and beyond EDIT |
|--|

Description of work

- | |
|---|
| <p>2.3.1 Construction of a searchable online information system for societies, building on existing surveys of taxonomic societies, and linked to the database of individual experts. The information service is for internal as well as external use.</p> <p>2.3.2 Arranging workshop on synergies / conflicts between non-professional and professional taxonomists (with WP4)</p> <p>2.3.3 Arranging Symposium for representatives of taxonomic networks (Sp2000)</p> |
|---|

Components

- | |
|---|
| <p>C2.3.2 Second version of the online information service on societies (Month 29)</p> <p>C2.3.3 Report on guidelines on how to meet mutual needs of non-professional and professional taxonomists (Month 28)</p> |
|---|

Milestones and expected result

- | |
|---|
| <p>M2.3.2 Workshop on synergies/conflicts between amateur and professional taxonomists, in collaboration with WP4 (Month 25)</p> <p>M2.3.3 Symposium for existing taxonomic networks (Month 32)</p> |
|---|

2.4 Supporting new joint research among EDIT partners through exchange of researchers

Work package number	2	Start date or starting event:	12
Activity Type	Other specific activities		

Objectives

- Facilitating exchange of researchers among EDIT partners, i.a., by developing a mechanism for support of research visits between partner institutions.

Description of work

2.4.2 Setting up and implementing a mechanism to support visits of staff and students between partner institutions.

Components

C2.4.2 Description of criteria for and mechanism of support (Month 24)

C2.4.3 Implementation of mechanism of support for staff exchange (Month 25)

Milestones and expected result

M2.4.3 First call for applications to grant for exchange of researchers (Month 25)

2.3 Workpackage 3: Integrating and Reshaping the Infrastructure Basis

Leader: NNM, Leo Kriegsman

Work package number		3		Start date or starting event:				3		
Activity Type				Other specific activities						
Participant id				CDC	MNHN	UKBH	CSIC-MNCN	UvA	NHN	NNM
Person-months per participant:				0	1,6	2,4	2,4	36,4	7,2	18,6
CBS	FUB-BGBM	NHML	RBGK	SMNS	RBINS	RMCA	NBGB	MIZPAN	IBPAN	
16	2,9	0,6	3,8	3,4	0,9	5,4	1,9	1	0,4	
HNHM	CUB	IBSAS	INRA	SMEBD	SP2000	BINRAS	ZINRAS	MO	USNM	MFN
0,4	1,4	0,4	0,4	2	0,4	0,4	0,4	0,1	0,1	0,4

Objectives

- Reduce the number of links in the chains of network decision making and in the operations of the (physical, equipment, digital, and administrative) infrastructure components.
- Add innovative analysing and modelling components, also from cooperating universities, to construct a new generation infrastructure.
- Promote that the integrated infrastructure will facilitate the mobilisation and organisation of innovative research excellence in Europe in strong and lasting networks.
- Establish agreements (commitments) at the level of institutional directors to achieve an integrated and dynamic approach.

Description of work

3.1 Network of the physical taxonomic infrastructures

- Integration
- Analysing the implications of (OECD) Biological Resource Centres (BRCs)

3.2 The taxonomic information infrastructure network

- The taxonomic information backbone
- European taxonomic information services
- Bioinformatics toolbox

3.3 Sustaining infrastructures

- The cybertaxonomy process
- Integration of European Taxon databases within the global Catalogue of Life

3.4 Large-scale networked instrumental facilities

- Organisation of European DNA-barcoding efforts
- Advanced remote microscopy in Europe

3.5 Liaisons with international infrastructures

- Fact finding of relevant networks

- Establishing contacts and meeting agendas, communication mechanism

Components (*adding to existing components from JPA2*)

- C3.1.1 First design report of integrated physical infrastructures (Month 20 → 25; component of D4)
- C3.1.2 Report on existing national consortia and other bi- and multilateral agreements between member institutions of EDIT (M25, possibly already delivered M23; component of Deliverable D3)
- C3.1.3 Report on the requirements for the physical infrastructure, stemming from research and stakeholder needs (Month 36)
- C3.1.4 Identification of barriers in the operations of the (physical, equipment, digital and administrative) infrastructure component (Month 40)
- C3.2.1 Contribution to the Global Name Architecture (GBIF/ECAT white paper); *earlier called: Report on the preliminary outline (backbone) of the European biodiversity information infrastructure* (Month 24 → 25)
- C3.2.3 Proposal for funding of pan-European species directories infrastructures, extending the geographical scope (Month 32)
- C3.2.4. Linking pan-European species directories infrastructure with structures outside Europe (M40)
- C3.2.5 Create funding opportunities to build and implement the EDIT phyloinformatics toolbox software based on the preliminary analysis of possible designs (Month 36)
- C3.4.3 Submit a funding proposal for a Fungal Barcoding Initiative (FBI), with Canadian scientists, identifying new suitable barcoding genes diagnostic at species level (Month 33)
- C3.4.4 Proposal(s) for funding of European DNA-barcoding projects and facilities (Month 36)
- C3.4.5 Organise workshop(s) on joint barcoding proposals (Month 36)
- C3.4.6 Establish liaisons with industry; coordinate current and foreseen initiatives for barcoding proposals by groups focussing on user and stakeholder needs (Month 40)
- C3.4.7 Submit a funding proposal for combining DNA-barcoding and ATBI+M in selected European areas (Month 32)
- C3.5.1 List of relevant networks (Month 23)
- C3.5.2 Proposal outline for an EDIT communication mechanism for cooperation and information exchange with other international networks and infrastructures (Month 23)
- C3.5.3 Full proposal for a communication mechanism (Month 33)
- C3.5.4 MoUs for cooperation with other networks/infrastructures (Month 36)

Milestones and expected result

- M3.1.2 Agreement on the principles for the joint physical infrastructure (Month 28)
- M3.1.3 At least one policy meeting to establish a working group for a specific sector of the EDIT infrastructure (e.g., collections management, lab facilities, taxonomic archives) (Month 27)
- M3.1.4 At least one working group established and meeting held for a specific sector of the EDIT infrastructure (e.g., collections management, lab facilities, taxonomic archives) (Month 33)
- M3.2.3 Meeting with focal point partners on the validation of the pan-European checklists, revitalising the Fauna Europaea expert network (Month 28)
- M3.2.4 Stability and continuity in the performance of the European Taxonomic Information Services (Month 36)
- M3.4.4. ECBOL website established as the central DNA-barcoding node in Europe; developed into a dynamic platform for demonstration of European barcoding work, interaction on collaborative research (proposals), priority setting, and liaising with global initiatives (Month 30)
- M3.4.5. European workshop to design joint barcoding proposals, using EDIT seed money, handling applications through ECBOL website (Month 33)
- M3.4.6. European meeting aimed at generating the matching component required for Europe to participate in the iBOL proposal and to coordinate activities to set-up new barcoding campaigns (e.g., Algae, Fungi) (Month 35)
- M3.4.7. meeting to work out formal proposal(s) to establish one or more major barcoding factories in Europe, and discuss lobbying strategies (Month 36)

M3.5.1 Contacts and meeting agendas established with other networks of excellence and international networks (Month 30)
M3.5.2 At least one meeting and workshop with international networks/infrastructures (Month 35)

3.1 Network of the physical taxonomic infrastructures

Work package number	3	Start date or starting event:	7
Activity Type	Other specific activities		

Objectives

- build a sustainable European infrastructure operating under a common research mission
- integrate physical (collections, labs, archives) and digital infrastructure
- create an infrastructure for and guide developments in DNA-barcoding in Europe
- streamline the European infrastructure for species information
- build a bioinformatics toolbox for nature conservationists and other stakeholders
- develop, together with other international taxonomic infrastructures, a common policy on the role of natural history collections, including associated data and expertise, in nature conservation

Description of work

3.1.4 Liaising with WP4-6 to connect research aims, innovative research methods and computing needs with the physical infrastructure required (e.g., collections to be acquired or deselected; lab infrastructure and computing facilities needed).

3.1.5 Establish at least one working group for a specific sector of the EDIT infrastructure, e.g., collections management, lab facilities, taxonomic archives. Organise a policy meeting for at least one working group.

Components

C3.1.1 First design report of integrated physical infrastructures (Month 20 → 25; component of D4)

C3.1.2 Report on existing national consortia and other bi- and multilateral agreements between member institutions of EDIT (M25, possibly already delivered M23; Component of D3)

C3.1.3 Report on the requirements for the physical infrastructure, stemming from research and stakeholder needs and needs from other WPs (Month 36)

C3.1.4 Identification of barriers in the operations of the (physical, equipment, digital and administrative) infrastructure component (Month 40)

Milestones

M3.1.2 Agreement on the principles for the joint physical infrastructure (Month 28)

M3.1.3 At least one policy meeting to establish a working group for a specific sector of the EDIT infrastructure (e.g., collections management, lab facilities, taxonomic archives) (Month 27)

M3.1.4 At least one working group established for a specific sector of the EDIT infrastructure (e.g., collections management, lab facilities, taxonomic archives) (Month 33)

3.2. The taxonomic information infrastructure network

Work package number	3	Start date or starting event:	3
Activity Type	Other specific activities		

Objectives

- Define the preliminary concept of a taxonomic backbone (components & structure), providing an efficient access and interlinking of taxonomic information, collection data and molecular markers in an integrated virtual (bench) architecture.
- Develop the infrastructure of regional/national basis for European taxon databases for the maintenance and updating of pan-European species lists
- Create funding opportunities to develop a user-friendly phyloinformatics toolbox

Description of work

3.2.1 Collaborate with other EDIT WPs and relevant other partners and programmes (Synthesys, LifeWatch, SpeciesBase, GBIF, etc.) on the design of the scope of a common web-based European biodiversity information infrastructure, especially investigating the efficient use of taxon names as keywords to cross-link biology information.

3.2.2 Start of implementation of (national) institutional bases for a common and durable organisation and management approach for the maintenance and updating of European species lists (including the marine ERMS species list within MARBEF).

3.2.3 Describe the model for the set up of an advanced pan-European species-directories infrastructure supporting the reach of a next (higher) level of completeness, quality, consistency, integration, incorporation, and (e-science) application. Travels to relevant East European institutes in Georgia, Turkey, Ukraine, Russia.

Components

C3.2.1 Contribution to the Global Name Architecture (GBIF/ECAT white paper); *earlier called: Report on the preliminary outline (backbone) of the European biodiversity information infrastructure* (Month 24 → 25)

C3.2.3 Proposal for funding of pan-European species directories infrastructures, extending the geographical scope (Month 32)

C3.2.4. Linking pan-European species directories infrastructure with structures outside Europe (M40)

C3.2.5 Create funding opportunities to build and implement the EDIT phyloinformatics toolbox software based on the preliminary analysis of possible designs (Month 36)

Milestones and expected result

M3.2.3 Meeting with focal point partners on the validation of the pan-European checklists, revitalising the Fauna Europaea expert network (Month 28)

M3.2.4 Stability and continuity in the performance of the European Taxonomic Information Services (Month 36)

3.3 Sustaining the cybertaxonomy process

Can start in month 37, depending on progress in WP5-6.

3.4 Large-scale networked instrumental facilities

Work package number	3	Start date or starting event:	6
Activity Type	Other specific activities		

Objectives

- Expand the European contribution to the global DNA-barcode of Life initiative.
- Promote a cooperative and standardised DNA-barcoding approach in Europe.

- Promote a cooperative and standardised effort toward remote microscopy in Europe
- Coordinate most European DNA-Barcoding initiatives

Description of work

3.4.1 Link up with the activities of the Consortium Barcode of Life by involving scientific committee members of CBoL and other (global) initiatives in ECBoL activities.

3.4.2 Inventory and identification opportunities for collaborative DNA-barcoding efforts for testing, standardising, and formulating priorities.

3.4.3 Development of Mycobank as a model approach for local data repository.

3.4.4 Start liaisons with industry for specific applications of barcoding technology.

3.4.5. Further develop the ECBOL website and stimulate the participation of partners and third parties involved in barcoding by using the website as a platform for exchange and cooperation.

Components

C3.4.3 Submit a funding proposal for a Fungal Barcoding Initiative (FBI), with Canadian scientists, identifying new suitable barcoding genes diagnostic at species level (Month 33)

C.3.4.4 Proposal(s) for funding of European DNA-barcoding projects and facilities (Month 36)

C.3.4.5 Organise workshop(s) on joint barcoding proposals (Month 36)

C3.4.6 Establish liaisons with industry; coordinate current and foreseen initiatives for barcoding proposals by groups focussing on user and stakeholder needs (Month 40)

C3.4.7 Submit a funding proposal for combining DNA-barcoding and ATBI+M in selected European areas (Month 32)

Milestones and expected result

M3.4.4. ECBoL website established as the central DNA-Barcoding node in Europe; developed into a dynamic platform for demonstration of European barcoding work, interaction on collaborative research (proposals), priority setting, and liaising with global initiatives (Month 30)

M3.4.5. European workshop to design joint barcoding proposals, using EDIT seed money, handling applications through ECBoL website (Month 33)

M3.4.6. Facilitate a European meeting aimed at generating the matching component required for Europe to participate in the iBoL proposal and to coordinate activities to set-up new barcoding campaigns (e.g., Algae, Fungi) (Month 35)

M3.4.7. Organise a meeting to work out formal proposal(s) to establish one or more major barcoding factories in Europe, and discuss lobbying strategies (Month 36)

3.5 Liaisons with international infrastructures

Work package number	3	Start date or starting event:	8
Activity Type	Other specific activities		

Objectives

- Establish a communication mechanism for cooperation and information exchange with other European networks of excellence, international networks of users of biodiversity services/information, comparable regional coordinated networks of biodiversity centres, and global taxonomic networks
- Secure a joint approach in the design and construction of taxonomic infrastructures around the world

Description of work

- Inventory of relevant networks, their aims, scope and partners, and contact persons
- Site visits, fact finding of organisation structure, and contacts for further cooperation:
 - Mexico (Conabio), Australia (national biodiversity inventory programme, flora and fauna projects; Australian Museum, ABRS, CSIRO; Month 24-25)
 - Costa Rica (INBIO; Month 26-27)
 - Europe (coordinating institutions of related EU networks of excellence) and South America or North America or East Asia (Month 28-32)

Components

C3.5.1 List of relevant networks (Month 23)

C3.5.2 Proposal outline for an EDIT communication mechanism for cooperation and information exchange with other international networks and infrastructures (Month 23)

C3.5.3 Full proposal for a communication mechanism (Month 33)

C3.5.4 MoUs for cooperation with other networks/infrastructures (Month 36)

Milestones and expected result

M3.5.1 Contacts and meeting agendas established with other networks of excellence and international networks (Month 30)

M3.5.2 Meetings and workshops with international networks/infrastructures (Month 35)

2.4 Workpackage 4: Integrating research strategies and liaison to users of taxonomy

Leader: CSIC – MNCN, Marian Ramos

Work package number		4		Start date or starting event:				0		
Activity Type				Other specific activities						
Participant id				CDC	MNHN	UKBH	CSIC-MNCN	UvA	NHN	NINM
Person-months per participant:				0	13	2	32	0,3	0,3	1,1
CBS	FUB-BGBM	NHML	RBGK	SMNS	RBINS	RMCA	NBGB	MIZPAN	IBPAN	
0,3	0,3	1,3	0,7	1,3	0,3	0,3	0,3	0,3	0,3	
HNHM	CUB	IBSAS	INRA	SMEBD	SP2000	BINRAS	ZINRAS	MO	USNM	MfN
0,3	0,3	0,3	0,45	0	0	0,3	0,3	0	0	7,4

Objectives

Build upon the vision proposed for taxonomy, to elaborate a common science policy and develop a joint research strategy to adapt to changing demands on taxonomic science from biodiversity, ecosystem research, and other stakeholders and users. Better integrate current research activities and explore emerging areas for taxonomic research for EDIT, and promote synergies among research efforts within EDIT and beyond.

Description of work

4.1 Developing science policy for taxonomic research

Proposing a joint science policy aiming at improving the contribution of EDIT to overcome of the taxonomic impediment, elaborate a common research strategy for EDIT institutions and update it regularly.

4.2 Liaison between research and users of taxonomic information

Surveying potential groups of stakeholders - in particular users - of taxonomic information and their needs for taxonomy and propose mechanisms to engage them into the policy framework of EDIT

4.3 Promoting integration and interdisciplinary research

Identify commonalities in current research activities of EDIT members, promote their integration and infer priorities for common research activities taking into account the conclusions of the symposium on “Future Trends of Taxonomy” and from the Future Scoping Group report.

Components

C4.1.6 Report on research plans and research activities of EDIT partner institutions including analysis identifying commonalities and complementarities (Month 32).

C4.1.7 First report from Science Policy Group including draft research strategy proposal based on the vision statement provided by the Report from the Future Scoping Group to the BoD – 2008 (C 1.2.3) and the recommendations from the “Future trends of taxonomy” symposium (C.4.3.1) (Month 29)

C4.1.8 Second report from Science Policy Group including proposal for implementing the research strategy to EDIT considering C4.1.6 and C4.1.7 (Month 35)

C4.2.1 Report on the results of questionnaire of thematic services of EDIT taxonomic institutions based on their social function (Month 28)

C4.2.2 Report on case-studies of users-scientists collaborations in EDIT institutions. Second report on stakeholders of taxonomy and their needs (Month 31)

C4.2.6 Report on bibliometric methodologies as tool to map a part of the users of taxonomy (Month 35).

C4.2.7 Report on user needs and openings for (long)-lasting collaboration with users of taxonomic information (Month 41).

C4.2.8/ C2.3.3 Report on guidelines on how to meet mutual needs of non-professional and professional taxonomists.

C4.3.2 Summary report with current research priorities of EDIT partner institutions (Month 30).

C4.3.3 Data base on approaches to taxonomy used by EDIT researchers (collaboration with WP2 task 2.1) (Month 26+)

C4.3.4 Contents for a Manual reviewing field methods and innovative techniques for innovative ATBI+M work (in collaboration with WP7) (Month 30).

C4.3.5 Report from additional workshop(s) on selected research activity (Month 27+).

C4.3.6 Report on workshop scientific publication in EDIT institutions (Month 35).

Milestones

M4.1.4 Research plans from individual EDIT partners compiled (Month 26)

M4.1.5 Interviews with key person for research policy in EDIT partner institutions to complement analysis of research plans done. (Month 29/30)

M4.1.6 Preliminary analysis of institutional research plans undertaken (Month 30)

M4.1.7 Science Policy Group constituted (Month 26)

M4.1.8 First meeting of the Science Policy Group (Month 26/27)

M4.1.9 First draft report of Science Policy Group for internal circulation & review (Month 28)

M4.1.10 Second meeting of the Science Policy Group (Month 34/35)

M4.1.11 Second draft report of Science Policy Group for internal circulation & review (Month 35)

M4.2.7. Series of workshops with users of different taxonomic services (between Month 30 and Month 41)

M4.2.8 Workshop for invited representatives of larger pan-European/international taxonomic societies with emphasis on synergies/conflicts between amateur and professional taxonomists, in collaboration with WP2 (Month 25)

M4.3.5 Survey of current focal research activities of EDIT partners (review of institutional annual research reports) compiled (Month 26)

M4.3.6 Categories for surveying institutional research priorities developed considering data of the WP2 information service (Month 27)

M4.3.7 Workshop on ATBI+M field recording techniques and protocols (Month 31)

M4.3.8 Proposals for further workshop(s) on focused research activities (Month 30+)

M4.3.9 Workshop on scientific publications in EDIT institutions. Publishing departments who wish to participate will be invited to determine contents for a possible common publishing policy and further integrating action(s) to be implemented in the 4th JPA. (Month 33)

4.1 Visions, research strategies, and science policy for taxonomy

Work package number	4	Start date or starting event:	0
Activity Type	Other specific activities		

Objectives

- Propose a joint science policy aiming at improving the contribution of EDIT to overcome the taxonomic impediment
- Elaborate a common research strategy for EDIT institutions and update it regularly.

Description of work

4.1.4 Analyse research and science plans from all EDIT partners. Identify commonalities and complementarities, and derive joint research targets.

The goal is to obtain an up-to-date overview of existing institutional research plans from EDIT partners for a comparative analysis, and as a basis for developing a joint research strategy in the future. The analysis of institutional research plans will have to be supplemented by interviews in those EDIT partners where a key person for research policy can be identified, as well as by a survey of current focal research activities (see 4.3.4)

4.1.5 Set up the Science Policy Group to propose a common Science Policy and a joint research strategy to better exploit complementarities and synergies in taxonomic research among EDIT members, in view of improving the answer to the needs of biodiversity and ecosystem research.

The aim is to propose a common research strategy based on three sources: the vision from the Future Scoping Group Report to the BoD-2008 (C1.2.3), the conclusions from the “Future trends of Taxonomy” symposium (C 4.3.1), and the existing science plans and current activities (see 4.1.4). This research strategy will be updated on a regular basis.

Components

C4.1.6 Report on research plans and research activities of EDIT partner institutions including analysis identifying commonalities and complementarities (Month 32).

C4.1.7 First report from Science Policy Group including draft research strategy proposal based on the vision statement provided by the Report from the Future Scoping Group to the BoD – 2008 (C 1.2.3) and the recommendations from the “Future trends of Taxonomy” symposium (C.4.3.1) (Month 29)

C4.1.8 Second report from Science Policy Group including proposal for implementing the research strategy to EDIT considering C4.1.6 and C4.1.7 (Month 35)

Milestones and expected result

M4.1.4 Research plans from individual EDIT partners compiled (Month 26)

M4.1.5 Interviews with key person for research policy in EDIT partner institutions to complement analysis of research plans done. (Month 29/30)

M4.1.6 Preliminary analysis of institutional research plans undertaken (Month 30)

M4.1.7 Science Policy Group constituted (Month 26)

M4.1.8 First meeting of the Science Policy Group (Month 26/27)

M4.1.9 First draft report of Science Policy Group for internal circulation & review (Month 28)

M4.1.10 Second meeting of the Science Policy Group (Month 34/35)

M4.1.11 Second draft report of Science Policy Group for internal circulation & review (Month 35)

4.2 Liaison between research and users of taxonomic information

Work package number	4	Start date or starting event:	0
Activity Type	Other specific activities		

Objectives

- Identification and categorisation of relevant stakeholder groups - in particular users - of taxonomic information.
- Assess their needs for taxonomy by sectors
- Develop mechanisms to integrate them into the EDIT strategic developments

Description of work

4.2.1 Compile information from EDIT members on their institutional views of who their users of taxonomic information are and what are their needs (e.g.: their perception of the social function of taxonomic institutions in Europe)

4.2.2 Work on methodologies to assess the needs of the different groups of users of taxonomic information.

4.2.6 Investigate methodologies for mapping users of taxonomic information.

4.2.7 Explore openings for (long-)lasting collaboration between the broader user community and taxonomists in academia.

Components

C4.2.1 Report on the results of questionnaire of thematic services of EDIT taxonomic institutions based on their social function (Month 28)

C4.2.2 Report on case-studies of users-scientists collaborations in EDIT institutions. Second report on stakeholders of taxonomy and their needs (Month 31)

C4.2.6 Report on bibliometric methodologies as tool to map a part of the users of taxonomy (Month 35).

C4.2.7 Report on user needs and openings for (long-)lasting collaboration with users of taxonomic information (Month 41).

C4.2.8/ C2.3.3 Report on guidelines on how to meet mutual needs of non-professional and professional taxonomists.

Milestones

M4.2.7. Series of workshops with users of different taxonomic services (between Month 30 and Month 41)

M4.2.8 Workshop for invited representatives of larger pan-European/international taxonomic societies with emphasis on synergies/conflicts between amateur and professional taxonomists, in collaboration with WP2 (Month 25)

4.3 Promoting and Integrating focused research activities for taxonomy in EDIT

Work package number	4	Start date or starting event:	0
Activity Type	Other specific activities		

Objectives

- Identify current thematic and geographic research foci from EDIT partners
- Stimulate new and network joint focused taxonomic research activities among EDIT partners
- Prospect new areas for integrated research in EDIT, e.g., as identified from SAC, liaison groups, NSC and BoD

Description of work

4.3.4 Identifying current research priorities at EDIT partner institutions by reviewing current research activities. This review aims at (i) identify commonalities and derive research targets, (ii) Explore the possibility of synergising existing research programmes, and will also complement 4.1.4, especially in the case of the EDIT partners for whom there are no research or science plans are available.

4.3.5 Organising thematic workshops on focused research activities.

4.3.6 Exploring and promoting new and emerging issues for joint taxonomic research activities.

4.3.7 Scientific publications. Many EDIT member institutions publish journals and/or monographs devoted to taxonomy. As an integrating action determine contents for a possible common publishing policy and further integrating action(s) to be implemented in the 4th JPA.

Components

C4.3.2 Summary report with current research priorities of EDIT partner institutions (Month 30).

C4.3.3 Data base on approaches to taxonomy used by EDIT researchers (collaboration with WP2 task 2.1) (Month 26+)

C4.3.4 Contents for a Manual reviewing field methods and innovative techniques for innovative ATBI+M work (in collaboration with WP7) (Month 30).

C4.3.5 Report from additional workshop(s) on selected research activity (Month 27+).

C4.3.6 Report on workshop scientific publication in EDIT institutions (Month 35).

Milestones

M4.3.5 Survey of current focal research activities of EDIT partners (review of institutional annual research reports) compiled (Month 26)

M4.3.6 Categories for surveying institutional research priorities developed considering data of the WP2 information service (Month 27)

M4.3.7 Workshop on ATBI+M field recording techniques and protocols (Month 31)

M4.3.8 Proposals for further workshop(s) on focused research activities (Month 30+)

M4.3.9 Workshop on scientific publications in EDIT institutions. Publishing departments who wish to participate will be invited to determine contents for a possible common publishing policy and further integrating action(s) to be implemented in the 4th JPA. (Month 33)

2.5 Workpackage 5: 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-MNCN	UvA	NHN	NNM
Person-months per participant:				0	23,5	0,5	30	0,5	0,5	0,5
CBS	FUB-BGBM	NHML	RBGK	SMNS	RBINS	RMCA	NBGB	MIZPA	IBPAN	
0,5	161,5	35	26	20,5	0,5	9,5	0,5	9,5	0,5	
HNHM	CUB	IBSAS	INRA	SMEBD	SP2000	BINRAS	ZINRAS	MO	USNM	MfN
2,5	14	14	0,5	0	0	0	0	0	0	

Objectives

- General: (i) Creation of the Internet Platform for Cybertaxonomy, oriented toward its practical use for revisionary taxonomy, taxonomic biodiversity inventories and monitoring of taxa. (ii) Integration of the participating institutions' biodiversity informatics and IT resources.
- Third 18-month period: (i) Integrate newly developed and existing taxonomic software using the first version of the Common Data Model (CDM), the Java Library based on the CDM, and standard data and communication interfaces. Integrate access to bibliographical, geographical and specimen information in the platform. Develop model for second version of the CDM. (ii) Continue the development of cooperative processes among the institutions by means of collaboration in the ISTC (Information Science and Technology Commission) and the development of Memoranda of Understanding on common practices in the ISTC sector.

Description of work

5.1 Integration of IST departments; overall WP5 coordination

- 5.1.1 Liaison with Board of Directors and Scientific Advisory Committee (SAC).
- 5.1.2 Documentation of IST (finished).
- 5.1.3 Information Science & Technology Committee (ISTC).
- 5.1.4 Management, coordination and liaison with other workpackages (WPs).
- 5.1.5 Promote scientific standards and standard tools.

5.2 Creating the Internet Platform for Cybertaxonomy

- 5.2.1 (Completed) Modelling for Revisionary Taxonomy.
- 5.2.2 (Completed) 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 (Deferred to 5.2.9 to 5.2.12) Implementation activities: Revisionary Taxonomy.
- 5.2.7 Implementation activities: ATBI's and Monitoring.
- 5.2.8 Designing the Platform Architecture.
- 5.2.9 Modelling of a Common Data Model (CDM)
- 5.2.10 Implementing a Java CDM Library
- 5.2.11 Implementing a CDM Community Store
- 5.2.12 Implement CDM Transformation Services
- 5.2.13 Implement Experts Database.
- 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 (Completed) Identify taxonomic tools.
- 5.5.2 (Completed) Taxonomic exchange standard specification.
- 5.5.3 (Completed) Testing of taxonomic database components.
- 5.5.4 Specification of concept-related workflows
- 5.5.5 Taxonomic editor prototype development
- 5.5.6 Sample data conversion
- 5.5.7 CDM data interface development
- 5.5.8 Fully functional taxonomic editor
- 5.6 Descriptive and identification platform components**
- 5.6.1 (Completed) Identify descriptive tools and define criteria.
- 5.6.2 (Completed) Testing of descriptive and identification components.
- 5.6.3 (Completed) Interact with providers of descriptive and identification components.
- 5.6.4 SDD Import/Export module for CDM v. 1.
- 5.6.5. Review of descriptive data in CDM v. 1.
- 5.6.6. Specify user interface for descriptive CDM data.
- 5.7 Security Infrastructure for platform data exchange and communication**
- 5.7.1 (Completed) Identify suitable communication tools.
- 5.7.2 (Postponed) Create the communication platform.
- 5.7.3 (Deferred to 5.2) Setup open review environment.
- 5.7.4 Integrate a Community Single Sign-On (CSSO) security infrastructure
- 5.7.5 (Postponed) Integrate Semantic Web Technologies within the platform.
- 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 (Completed) Specification of data flow within rapid publication platform.
- 5.8.4 (Deferred to 5.2.3) Implement publication data store.
- 5.8.5 (Deferred to WP6) 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.

5.9.3 Interfacing the Web Portal with the CDM

Components

C5.23 A set of use template or example agreements and/or licences for use with suppliers (preferably based on a Creative Commons Licence (NHML, Month 25)

C5.27 Pilot website for OpenUrl Service available (NHML, Month 30)

C5.28 Portal prototype functional for machine access to Metadatabase (NHML with FUB-BGBM) (Month 30)

C5.29 Pilot of Metalib functional for human access (NHML with FUB-BGBM) (Month 30)

C5.30 Launch of ViTL as a functioning component of the EDIT Platform for Cybertaxonomy including system and user documentation to enable effective access (NHML, Month 40)

C5.39 Application to map inventory completeness (CSIC, Month 45)

C5.40 Application to select vectorial units by environmental and spatial criteria (ED application) (CSIC, Month 45)

C5.41 Documentation for GIS web application available (RMCA Month 30).

C5.43 Test data report (CUB & IBSAS, Month 33)

C5.50 Report on integration of existing descriptive tools into the Platform (MNHN-UPMC, Month 29)

C5.54 First MoU(s) ready to be proposed to directors (ALL, Month 35)

C5.55 Platform environment circumscribed based on existing standards (FUB-BGBM, Month 25).

C5.56 Interface to CDM community store implemented and usable within the platform (RBGK with BGBM, Month 29).

C5.57 First CDM framework implementation available (FUB-BGBM with ALL[Developers], Month 30).

C5.58 CDM2 framework implementation available (FUB-BGBM with ALL[Developers], Month 41).

C5.59 CDM2 community store interfaces documented (FUB-BGBM with ALL[Developers], Month 41).

C5.60 ATBI site data linked to geo-platform (SMNS with CSIC, RMCA, BGBM & ALL[Developers], Month 40)

C5.62 EDIT IP framework documents circulated to BoD (NHML, Month 25)

C5.63 Memorandum of cooperation for EDIT institution libraries (NHML, Month 32)

C5.64 Global background maps available in printing quality (RMCA with CSIC, IBSAS, CUB, HNHM, SMNS) Month 24)

C5.65 Point (occurrence) map generation web service for online and print quality maps released and online available. (RMCA and CSIC with IPSAS and CUB Month 26)

C5.66 Regional distribution map generation web service for online and print quality maps released and online available. (RMCA and CSIC with IPSAS and CUB, Month 28).

C5.67 Map generation web services enhanced for Publication ready maps (print quality) (RMCA, Month 30).

C5.68 API Documentation for map generation web services available (RMCA, CSIC, SMNH with IBSAS, CUB & HNHM Month 31).

C5.69 E-conference on requirements of geospatial services for taxonomists (MIZPAN with RMCA, Month 36).

C5.70 Implementation of converter web service that transforms point occurrence data to distribution data (RMCA & CSIC, Month 34).

C5.71 Organisation of a joint Geospatial training course with WP5.4, WP7 and WP8 (RMCA, SMNS) (Month 36).

C5.72 Dynamically link GBIF data to core geo-platform allowing GBIF data to be visualised in addition to custom user data. This affects the GIS web application and also the map generation web services by

adapting the Generic Query tool developed in SYNTHESYS NA-D. (RMCA, MIZPAN & HNHN with SMNH, Month 40).

C5.73 Workshop with WP7 contributors to geo-platform to review geo-platform functionality (report on requirements) (SMNH with RMCA, CSIC, MIZPAN, IBSAS, CUB & HNHN, Month 41).

C5.74 Specification of concept-related workflows to be supported by the taxonomic editor (wiki site) (Month 30).

C5.75 V1.0 of the CDM taxonomic editor available (software) (Month 30).

C5.76 Taxonomic sample data available (data) (Month 36).

C5.77 CDM data interface components available (software) (Month 36).

C5.78 V2.0 of the CDM editor available (software) (Month 41).

C5.79 Import/Export module for CDM v.1 (MNHN-UPMC, Software, Month 32)

C5.80 Review of CDM v.1 and model for descriptive data in CDM v.2 (MNHN-UPMC, Report/Model, Month 35)

C5.81 Use case model and functional description of CDM descriptive data editor (MNHN-UPMC, Model/Report, (Month 38).

C5.82 Specification of CSSO profiles for the platform covering the use cases web application, web service and desktop application (FUB-INF, Month 27).

C5.83 Setup the initial CSSO security infrastructure for the platform (FUB-INF, Month 29).

C5.84 Integrate the CSSO Identity Provider component with the Experts-DB (FUB-INF with FUB-BGBM & WP2, Month 29).

C5.85 Integrate further platform components with the CSSO security infrastructure (FUB-INF, Month 41).

C5.86 Data portal prototype (RBGK with FUB-BGBM, Month 26)

C5.87 (Month 26) WP6 exemplar group data migrated to CDM v1 (RBGK with BGBM, NHM)

C5.88 Functional description for service to generate printed publication from the CDM (RBGK, Month 41)

C5.89 List of data items and searchable data items in existing portals (FUB-BGBM, Month 26)

C5.90 Inclusion of missing data items in GBIF index (FUB-BGBM, Month 27)

C5.91 CDM storage functionality implemented (FUB-BGBM, Month 31)

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

- Promote and pursue institutional integration on the level of the use and organisation of IT processes among partner institutions
- Initiate MoUs between institutions with IST departments that are part of collaborative activities within EDIT
- Maintain the communication with other workpackages, oversee the timely execution of work and implement decisions of the executive groups within EDIT

Description of work

5.1.1 Liaison with Board of Directors (BoD) and Scientific Advisory Committee (SAC). This is a coordinative function which is 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.

5.1.2 (completed)

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 needed platform interfaces, integration of existing applications, content of possible agreements (MoUs), and future work-plans. The ISTC is to ensure interoperability and (as far as possible) compatibility of components to ease replicated installations.

5.1.4 Management, coordination, and liaison with other workpackages (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. Initiate an interactive website, the *Biodiversity Service & Application Tracker*, a collection of links to software, tools and resources useful to taxonomists, where all applications and services are categorised into an expandable and potentially hierarchical system covering major biodiversity research topics.

Components

C5.54 First MoU(s) ready to be proposed to directors (ALL, Month 35)

Milestones

M5.20a BD Tracker launched (FUB-BGBM, Month 24)

M5.21b 3rd ISTC Meeting held (FUB-BGBM with ALL, Month 30)

5.2 Creating the Internet platform for Cybertaxonomy

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

Objectives

- Framework construction: Based on the first version of the Common Data Model (the UML model of all important data being exchanged in the platform) continued construction of the first version of the CDM Framework (CDM Java library, CDM community store) in collaboration with activities 5.3-9, WP6, WP7 the CATE, Key2Nature, and PESI projects and interested agencies.
- Testing and developing the framework: (i) Perform integration/compatibility tests for platform components (for 5.4, 5.5, and 5.6); (ii) Start the process of migrating exemplar groups to the CDM community store; (iii) Implement first synchronisation interface(s); (iv) Integrate ATBI site data with geo-platform services (especially the GIS web application 5.4.8); (v) Implement CDM based interfaces to institutional information systems; (vi) CDM interfacing with ViTaL (5.3) and GEO 5.4 components; (vii) Extending CDM community store API to the needs of ATBI site data, replacing central WP7 ATBI database (WP7)
- Documentation: Publish a continuously updated manual defining platform interfaces.
- CDM v.2: Draft, discuss and agree the second version of the CDM.
- Implement the EDIT expert database in collaboration with activity 5.7 and WP2.

Description of work

5.2.1 Completed

5.2.2 Completed

5.2.3 Define technical interfaces. To achieve integration of components into the platform environment, formal 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 programmes and components. This holds especially true for interfaces to the central CDM Community Store (see 5.2.11), but also to other components such as the geo-services in 5.4.

5.2.4 (Deferred to 5.7)

5.2.5 (Deferred to 5.6)

5.2.6 (Deferred to 5.2.9 to 5.2.12)

5.2.7 Implementation activities: ATBI's and Monitoring. 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). Close collaboration with Activity 7.2 in WP7. Ensure compatibility with the CDM and make use of CDM store and library as much as possible.

5.2.8 Designing the Platform Architecture. Continue to refine the overall panel of platform components and their interaction (see 5.4, 5.5, 5.6 & 5.7) and ensure their integration

5.2.9 Modelling of a Common Data Model (CDM). Develop a second version of the CDM based on the experience made in the other tasks and activities concerned with software development and interfacing. Seek cooperation with many external partners or standard bodies such as TDWG.

5.2.10 Implement a Java CDM Library. Continue to implement a java library with classes that correspond to the CDM v.1. The library allows Java developers to quickly develop new CDM based applications. At the core of the library lies data persistency. Upgrade to CDM v.2 once that has been finalised.

5.2.11 Implement a CDM Community Store. Continue to implement a data store on top of the CDM library (5.2.10) that exposes a set of web services that allow manipulation of the CDM data, RSS feeds for changes and other general services useful for platform components. Upgrade to CDM v.2 once that has been finalised.

5.2.12 Implement CDM Transformation Services. Define and implement services that transform from/to CDM data definitions to/from other existing standards like BibTex or TDWG standards.

5.2.13 Implement Experts Database. Continue to implement a database managing taxonomic expertise via a web interface for WP2.

Components

C5.55 Platform environment circumscribed based on existing standards (FUB-BGBM, Month 25).

C5.56 Interface to CDM Community store implemented and usable within the platform (RBGK with BGBM, Month 29).

C5.57 First CDM framework implementation available (FUB-BGBM with ALL[Developers], Month 30).

C5.58 CDM2 framework Implementation available (FUB-BGBM with ALL[Developers], Month 41).

C5.59 CDM2 Community store interfaces documented (FUB-BGBM with ALL[Developers], Month 41).

C5.60 ATBI site data linked to geo-platform (SMNS with CSIC, RMCA, BGBM & ALL[Developers], Month 40)

Milestones

M5.22 Revised CDM2 frozen and documented (Month 36).

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

- Website and services: Launch pilot website and portal prototype both for machine and human access. Continuously enhance search functionality and extend the scope of the search to cover additional resources. Regular assessment of site feedback and feature requests with new features implemented as appropriate.
- Content: (i) Metalib knowledge base: federate EDIT partner's taxonomic literature resources and make them accessible to Platform users; (ii) Metadatabase of taxonomically relevant references: Create a metadatabase of literature references (nomenclatural and bibliographic) used by taxonomists.
- Nomination for digitisation functionality: Allow users of ViTaL to nominate and prioritise literature items for digitisation. This information will be available to users of the site and also to members of digitisation projects, allowing them to include this information in the prioritisation decisions they make.

Description of work

5.3.1 (Completed)

5.3.2 (Completed)

5.3.3 Development of the resource catalogue. (i) Metalib knowledge base development:

Agreement with institutional libraries on their contribution and advice how to add additional content to the knowledge base. Incorporating EDIT institution subscription data as supplied by participating EDIT partner libraries into the ViTaL knowledgebase to support access to content for users from those institutions. Liaise with other OpenURL resolving services to encourage the sharing of data about open content resources. Addition of links to full content resources as these become available, particularly those that are covered by the Metadatabase; (ii) **Development of the Metadatabase):** Specify and implement initial metadata harvester for scratchpads, CDM community stores and participating Connotea users, utilising as much of the CDM framework as possible (in particular the CDM store to enable machine access) as possible. Evaluating the system's extension to Nomenclators (ZooBank, IPNI, Index Fungorum, Tropicos Names, etc.)

5.3.4 (Deprecated & included in 5.3.2 & 5.3.6)

5.3.5 Intellectual Property Rights (IPR). Provide a set of template or example use-agreements and/or licences for use with suppliers (preferably based on a suitable Creative Commons Licence) Formulate user guidelines for working out copyright status of content. Provide support for WP6 and WP7 rights management

5.3.6 Interface development and implementation. Implement a pilot ViTaL website using Metalib and Drupal 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

Components

C5.23 A set of use template or example agreements and/or licences for use with suppliers (preferably based on a Creative Commons Licence (NMHL, Month 25)

C5.27 Pilot website for OpenUrl service available (NHML, Month 30)

C5.28 Portal prototype functional for machine access to Metadatabase (NHML with FUB-BGBM) (Month 30)

C5.29 Pilot of Metalib functional for human access (NHML with FUB-BGBM) (Month 30)

C5.30 Launch of ViTL as a functioning component of the EDIT Platform for Cybertaxonomy including system and user documentation to enable effective access (NHML, Month 40)

C5.62 EDIT IP framework documents circulated to BoD (NHML, Month 25)

C5.63 Memorandum of cooperation for EDIT institution libraries (NHML, Month 32)

Milestones

M5.23 All EDIT institution libraries contacted with invitation to participate in ViTaL (NHML, Month 24)

M5.24 Details of Z39.50 catalogue resources provided to the ViTaL team (NHML) by the initial set of actively collaborating institutions (Month 32)

M.5.25 Journal subscription information provided to the ViTaL team (NHML) by the initial set of actively collaborating institutions (Month 35)

M5.26 (Formaly M09) Launch ViTaL (Month 40)

(M5.27 deprecated)

5.4 Geographical platform components

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

Objectives

- **Web services:** Implementation of (i) a simple point (occurrence) map generation web service for online and print quality maps based on custom user data submitted to the service; (ii) a regional presence/absence distribution map generation web service for online and print quality maps based on custom user data submitted to the service; (iii) a module to upload end-user geo-referenced data and geo-referenced data from external sources like GBIF, Gazetteers, layers, and bibliographic resources; and (iv) a converter web service that transforms point occurrence data to distribution data. Publication of documentation and instructions for the GIS web application package.
- **User involvement:** Organisation of testing in collaboration with WP7 and 5.2. Enhancement of applications according to feedback from test users. E-Conferences on requirements of geospatial services for taxonomists, including EDIT members from WP5, WP6 & WP7. Results will feed into tasks for JPA4.
- **Resources:** Compilation of further global background maps (resources) of different types that can be used for visualisation web services. Enhancement of the currently available GIS download page in order to include all the freely available vectorial and raster digital information of the geography, environment and biological resources for Europe.
- **Spreading the Excellence:** Organisation of a joint Geospatial training courses or workshops with WP5.4, WP6, WP7, and WP8. Topics: Guidelines on information to collect during field sampling, Post processing of the collected information; Use of Geospatial related and statistical tools; Production of Distribution maps.

Description of work

5.4.1 Access to resources. Provide resources for the geo-platform, primarily GIS layers, including worldwide maps useful for web publications as well as high quality printing. Different map types including physical, political, vegetation and other types will be gathered based on the needs identified in other tasks and on the needs expressed by WP6 and WP7. Identify resources 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).

5.4.2 Core geo-platform. Create central infrastructure based on open OGC services to develop services and applications needed for revisionary taxonomy (see 5.4.7+8).

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 report on the needs and characteristics of

complete software able to accomplish predictive models.

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. Integrate into Core geo-platform additional mapping applications in order to visualise the geographical location of units (countries, regions, grid squares, etc.) according to their completeness, and to recognise 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.

5.4.6 Training courses. Arrange GIS training courses and seminars for taxonomists, curators and especially WP6 & 7. Dissemination of compiled resources from 5.4.1

5.4.7 Visualisation web services. Design, implement and host simple REST web services that allow the visualisation of custom user data optionally combined with GBIF occurrence data. At least two kinds of services will be provided that create maps, i.e. images, for point occurrence data or regional distribution data. Document each services API online. Consider use cases when small regions like islands need to be displayed in a larger context, especially for regional distribution maps.

5.4.8 Taxonomic GIS web application. Develop an online GIS application for users to visualise and analyse their data (potentially combined with GBIF data). Requirements for this online GIS should be specified in collaboration with WP7 with ATBI sites being a primary use case for this tool.

Components

C5.64 Global background maps available in printing quality (RMCA with CSIC, IBSAS, CUB, HNHM, SMNS) Month 24)

C5.65 Point (occurrence) map generation web service for online and print quality maps released and online available. (RMCA and CSIC with IPSAS and CUB Month 26)

C5.66 Regional distribution map generation web service for online and print quality maps released and online available. (RMCA and CSIC with IPSAS and CUB, Month 28).

C5.67 Map generation web services enhanced for Publication ready maps (print quality) (RMCA, Month 30).

C5.41 Documentation for GIS web application available (RMCA Month 30).

C5.68 API Documentation for map generation web services available (RMCA, CSIC, SMNH with IBSAS, CUB & HNHM Month 31).

C5.69 E-conference on requirements of geospatial services for taxonomists (MIZPAN with RMCA, Month 36).

C5.43 Test data report (CUB & IBSAS, Month 33)

C5.70 Implementation of converter web service that transforms point occurrence data to distribution data (RMCA & CSIC, Month 34).

C5.71 Organisation of a joint geospatial training course with WP5.4, WP7 and WP8 (RMCA, SMNS) (Month 36).

C5.72 Dynamically link GBIF data to core geo-platform allowing GBIF data to be visualised in addition to custom user data. This affects the GIS web application and also the map generation web services by adapting the Generic Query tool developed in SYNTHESYS NA-D. (RMCA, MIZPAN & HNHM with SMNH, Month 40).

C5.73 Workshop with WP7 contributors to geo-Platform to review geo-platform functionality (report on requirements) (SMNH with RMCA, CSIC, MIZPAN, IBSAS, CUB & HNHM, Month 41).

C5.39 Application to map inventory completeness (CSIC, Month 45)

C5.40 Application to select vectorial units by environmental and spatial criteria (ED application) (CSIC, Month 45)

Milestones

M5.28 Report on guidelines to produce Publication ready-maps (Month 30)

M5.29 Meeting of Geospatial group and Edit developers (Month 33)

M5.30 Training material compiled for training courses (Month 35)

5.5 Taxonomic-core platform components

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

Objectives

- Organise user input for the specification and continued implementation of the EDIT taxonomic core and editing software.
- Develop specifications for advanced concept related workflows and assess their efficiency.
- Develop and compile software components for taxonomic core interfacing (e.g. import modules and conversion tools).
- Provide appropriate real world data sets to support CDM modelling and software developments.

Description of work

[The specification of technical interfaces is covered by operation 5.2.3.]

5.5.1 Task completed.

5.5.2 Task completed.

5.5.3 Task completed.

5.5.4 Specification of concept-related workflows. Based on user involvement of WP6 exemplar groups as well as an expert workshop bringing together highly experienced taxonomists already working with concept enabled software products (e.g. Berlin model taxonomic editor, create a specification of concept-related taxonomic workflows at both model level and editor software level. Outcomes of the study will be published as a Wiki site so that additional findings can be added later. The Wiki will also serve for a scientific publication at a later stage.

5.5.5 Taxonomic editor prototype development. Use existing taxonomic editor design studies as well as 5.5.4 outcomes to implement a first functional version of the CDM-Editor.

5.5.6 Sample data conversion. Organise availability of a set of major European taxonomic datasets (e.g. Euro+Med and Fauna Europaea) and smaller but significant taxonomic projects (e.g. EDIT exemplar groups) for conversion into the EDIT common data model.

5.5.7 CDM data interface development. Implement and provide interface software for the EDIT common data model including data import modules for prominent data formats (e.g. TCS, Berlin model) as well as conversion tools (e.g. from CDM to TDWG rdf).

5.5.8. Taxonomic editor. Use sample data (5.5.6) and user input to refine the existing CDM-Editor prototype toward the fully function version 2.0 of the taxonomic editing system.

Components

C5.74 Specification of concept-related workflows to be supported by the taxonomic editor (Wiki site) (Month 30).

C5.75 V1.0 of the CDM taxonomic editor available (software) (Month 30).

C5.76 Taxonomic sample data available (data) (Month 36).

C5.77 CDM data interface components available (software) (Month 36).

C5.78 V2.0 of the CDM editor available (software) (Month 41).

Milestones

M5.15 Taxonomic core components available for platform (Month 29)
 M5.32 Three significant taxonomic initiatives setup as CDM projects (e.g. EDIT exemplar groups) (Month 36).
 M5.33 CDM Toolkit Bundle (data store, editor, conversion tools) available and documented to be used by EDIT partner institutes and beyond (Month 41).

5.6 Descriptive and identification platform components

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

Objectives

- Ensure the compatibility and interoperability of existing descriptive tools with the descriptive part of the CDM.
- Review CDM version 1 and specify changes to be implemented in version 2
- Specify the functionality for the descriptive CDM-Editor.

Description of work

5.6.1 (Concluded)

5.6.2 (Concluded)

5.6.3 (Concluded).

5.6.4. SDD Import/Export module for CDM to enable the use of existing descriptive content as well as descriptive and phylogenetic software tools in conjunction with CDM-based software. Whereas an integration of nomenclatural, taxonomic and descriptive data editing in a single CDM editing environment (see 5.6.6.) is highly desirable, many descriptive tools can be loosely coupled through TDWG's SDD (Structured Descriptive Data) exchange format, utilising the investment in current software. Examples are the generation of natural language descriptions, dynamic generation of printable, branching keys, interactive identification of a pocket computer or smart phone, phylogenetic analysis).

5.6.5. Review of descriptive data in the CDM. In this period this refers to CDM v. 1 and is done by comparison with the existing class model and implementation experience with the Java-based XPer2 programme. This is to result in an improved and stable model for descriptive data in CDM v. 2.

5.6.6. Specify user interface for descriptive CDM data. Revision and emendation of existing UML use-case model for handling descriptive data, adding missed use cases and creating detailed use case scenarios. This will result in a functional description and specification of the CDM descriptive data editor.

5.6.7 Communication and exchange with taxonomic community. Update of the community website (BDtracker) with taxonomic applications; FAQ documents; moderation of forum activity; training actions in coordination with WP8.

Components

C5.50 Report on integration of existing descriptive tools into the Platform (MNHN-UPMC, Month 29)

C5.79 Import/Export module for CDM v.1 (MNHN-UPMC, Software, Month 32)

C5.80 Review of CDM v.1 and model for descriptive data in CDM v.2 (MNHN-UPMC, Report/Model (Month 35)

C5.81 Use case model and functional description of CDM descriptive data editor (MNHN-UPMC, Model/Report (Month 38).

Milestones

M5.18 SDD import module functional (Month 32) M5.19b Functional description for descriptive user interface (i.e. for descriptive data CDM 2 editor incl. SDD import). (Month 35)

5.7 Security Infrastructure for platform data exchange and communication

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

Objectives

- Design of a security infrastructure for the platform and introduction of a secure Single Sign-On service (SSO) for the platform

Description of work

5.7.1 (Completed)

5.7.2 (Postponed)

5.7.3 (Deferred to 5.2).

5.7.4 Integrate a Community Single Sign-On (CSSO) security infrastructure within the platform. The CSSO enables the various EDIT service providers to protect their services and resources defining individual access control policies, while users can access different services using only one identity. The security infrastructure bases on the SAML protocol family (e.g. Shibboleth) and provides its federation concept to realise the community aspect. The task comprises the following sub-tasks:

- Lobbying for the CSSO security infrastructure
- Specification of CSSO profiles for the platform covering the use cases web application, web service and desktop application
- Setup and maintain the CSSO security infrastructure for the platform
- Integrate the CSSO Identity Provider component with the Experts-DB developed by WP2 to build up initial user base for EDIT.
- Integrate further platform components with the CSSO security infrastructure

5.7.5 (Postponed)

Components

C5.82 Specification of CSSO profiles for the platform covering the use cases web application, web service and desktop application (FUB-INF, Month 27).

C5.83 Set up the initial CSSO security infrastructure for the platform (FUB-INF, Month 29).

C5.84 Integrate the CSSO identity provider component with the Experts-DB (FUB-INF with FUB-BGBM & WP2, Month 29).

C5.85 Integrate further platform components with the CSSO Security Infrastructure (FUB-INF, Month 41).

Milestones and expected result

M5.19a CSSO Security Infrastructure fully functional (Month 35)

5.8 Publication support as a platform component

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

Objectives

- To develop a web Data portal to present CDM data from the three WP6 exemplar groups
- Work closely with WP6 and other related projects or efforts.
- Produce a functional design for a structure to support printed publications for taxonomic data.

Description of work

5.8.1 (Completed)

5.8.2 Develop web monograph pilot system. The web data portals will present information from the CDM from the three exemplar taxonomic groups; Palms, Cichorieae, and Mililchiidae. The portals will be developed using javascript and PHP, and compiled using the Drupal CMS. The portals will share a common platform where possible, diverging where necessary to meet the needs of the individual communities. Development work will be divided between RBGK and the FUB-BGBM.

5.8.3 (Completed)

5.8.4 (Deferred to 5.2.3)

5.8.5 (Deferred to WP6)

Components

C5.86 Data portal prototype (RBGK with FUB-BGBM, Month 26)

C5.87 (Month 26) WP6 exemplar group data migrated to CDM v1 (RBGK with FUB-BGBM, NHM)

C5.88 Functional description for service to generate printed publication from the CDM (RBGK, Month 41)

Milestones

M5.20b Complete Data portal available (Month 36)

5.9 Specimen access as a platform component

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

Objectives

- Platform component to integrate specimen access according to taxonomist's needs

Description of work

5.9.1 Define specimen access interface for taxonomists. Compile the specimen access functionality of existing specimen access portals for zoological, mycological and botanical specimens. Attempt to develop a priority list of access points. Negotiate the inclusion of access points in the GBIF index.

5.9.2 Implement access interface for taxonomists. Building on the specimen access software (interfaces and generic thesaurus access) developed by the BioCASE and Synthesys projects, provide a specimen access interface tailored to taxonomist's needs.

5.9.3 Interfacing the Web Portal with the CDM for specimen data storage.

Components

C5.89 List of data items and searchable data items in existing portals (FUB-BGBM, Month 26)

C5.90 Inclusion of missing data items in GBIF index (FUB-BGBM, Month 27)

C5.91 CDM storage functionality implemented (FUB-BGBM, Month 31)

Milestones

M5.21a Operational specimen web portal (Month 29)

2.6 Workpackage 6: Unifying Revisionary Taxonomy

Leader: NHML, Dave Roberts

Work package number		6		Start date or starting event:				4		
Activity Type				Other specific activities						
Participant id				CDC	MNHN	UKBH	CSIC-MNCN	UvA	NHN	NNM
Person-months per participant:				0	8	0.5	0	6	4	2
CBS	FUB-BGBM	NHML	RBGK	SMNS	RBINS	RMCA	NBGB	MIZPAN	IBPAN	
0	27	80	40	0	2	3	0	0	0	
HNHM	CUB	IBSAS	INRA	SMEBD	SP2000	BINRAS	ZINRAS	MO	USNM	MFN
0	0	0	0	0	0	0	0	0	0	0

Objectives

- Define and develop the means to provide access to the currently highly fragmented taxonomic information source.
- Facilitate and support communities of taxonomic expert.
- Define what is needed from the cyber-environment for taxonomic web content to be delivered.
- Assess barriers to implementation.

Description of work

6.0 Integration with other workpackages

- 6.0.1 Develop further the general project architecture with WP5 and identify responsibilities for elements within it.
- 6.0.2 Engage with WP2 over the formation of taxonomic communities.
- 6.0.3 Engage with WP7 to identify the information needs of the biodiversity assessment community.
- 6.0.4 Engage with WP4 to define user requirements.
- 6.0.5 Engage with WP5 to develop portal modules.
- 6.0.6 To plan training in use of scratchpads with WP8.

6.1 Content building

- 6.1.1 Collect exemplar data.
- 6.1.2 Populate CDM (Common Data Model).
- 6.1.3 Evaluate CDM.
- 6.1.4 Evaluate platform modules.
- 6.1.5 Scratchpad data harvester.

6.2 Community building

- 6.2.1 Engage new communities.

6.3 Content delivery

- 6.3.1 Evaluate portal.
- 6.3.2 Scratchpad SpeciesPage.
- 6.3.3 Scratchpad exposé.
- 6.3.4 Scratchpad Phase IV

Components

- C2.1.7 Data on experts associated with first batch of demonstrator group activities, coordinated by WP2 (Month 29) (=>D10).
- C6.7 Develop a migration path for appropriate content from the scratchpads to the CDM (Month 29) (=> D11).
- C6.8 Test and evaluate the taxonomic editor being developed by WP5 (=C5.74 Month 30) (=> D11).
- C6.9 Report resulting from a workshop on web publication issues and IPR (Month 26).
- C6.10 Report on discussions of the first version of the Data portal with the user communities (Month 29)
- C6.11 Develop a metric in collaboration with other major content providers to provide a statistic usable in career management (Month 42).
- C6.12 Deliver a training package for scratchpads (Month 31).

Milestones

- M2.0.4 Plan for collaboration with WP2 established (Month 30)
- M2.3.3 Symposium for existing taxonomic networks (in conjunction with WP1? (SAC chair) and WP4, coordinated by WP2 (Month tba [autumn 2008])
- M6.16 First version of the content structure of the Cichorieae web revision (Month 29)
- M6.21 Meeting of the palm expert taxonomic network (Month 29)
- M6.24 WP6 exemplar group data migrated to CDM v1 (=5.5.6; Month 33)
- M6.25 Second version of the palm expert community scratchpad (Month 29)
- M6.27 Identify additional needs from the user community (Month 29)
- M6.28 First version of the dipterist community scratchpad (Month 29)
- M6.30 integrate the modules in the scratchpads to simplify the generation of species pages (Month 30)
- M6.31 Critical evaluation of the first version of the Common Data Model (CDM, built by WP5) (= 5.2.9; Month 33)
- M6.32 To integrate external data sources (e.g. digitised type specimen images) into the CDM (=5.2.9; Month 36)
- M6.33 Deliver an enhanced scratchpad capacity for external data integration and display (Month 36).
- M6.35 First MoU(s) with external data providers ready to be signed (Month 40)
- M6.36 Offer an integrated suite of tools to facilitate data compilation. (Month 40)
- M6.37 Evaluate and feedback on the module elements produced by WP5 (=5.5.7; 5.6.4; C5.79 Month 40)
- M6.38 Evaluate progress in XML markup tools as mechanisms for data capture (Month 42)
- M6.39 Provide an API to scratchpad content (Month 33)

6.0 Integration with other workpackages

Work package number	6	Start date or starting event:	4
Activity Type	Other specific activities		

Objectives

- Coordinate activities in WP6 with other workpackages to maximise benefit and minimise duplication of effort.
- Define areas of responsibility within an overall EDIT strategy.

Description of work

6.0.1 Project architecture

Develop further the general project architecture with WP5 and identify responsibilities for elements with it.

6.0.2 Engage with WP2:

Develop a mechanism to form taxonomic communities.

6.0.3 Engage with WP7:

Identify the information needs of the biodiversity assessment community.

6.0.4 Engage with WP4:

Define user requirements (→ 4.2)

6.0.5 Engage with WP:

To develop the portal module (=5.9.3).

6.0.6 Engage with WP8:

Training in use of scratchpads.

Components

C6.12 Deliver a training package for the scratchpads (Month 31)

Milestones and expected result

M2.0.4 Plan for collaboration with WP2 established (Month 30)

6.1 Content building

Work package number	6	Start date or starting event:	4
Activity Type	Other specific activities		

Objectives

- Collaborate with WP5 developing a taxonomic editor.
- Populate the Common Data Model (CDM) with data gathered by the exemplar groups.
- Devise modules to facilitate adding structure to data and thus to populate the CDM. It is important that contributors can see value at every stage of this process and can make each stage publicly visible.
- Explore the use of XML markup as a mechanism to extract structured data from documents. These applications are being written outside EDIT and are being monitored for progress. It is essential that these tools can be used by authors on their own papers prior to submission to EDIT.
- Examine the IPR issues in data capture. There is much confusion about how and what previously published information can be legitimately used without seeking explicit publisher's permission. A post-workshop report is planned to address these concerns.

Description of work**6.1.1 Collect exemplar data:**

Gather and produce example content for revisionary taxonomy.

Examine IPR issues around data capture.

6.1.2 Populate CDM:

In conjunction with WP5, add content to the CDM from the Exemplar Groups (cf. 5.2.11).

6.1.3 Evaluate CDM:

Develop enough content from the exemplar groups in the CDM to test the delivery interface (=5.5.7; month 30)

6.1.4 Evaluate Platform modules:

Explore the use of XML markup tools as a mechanism to capture structured data.

6.1.5 Scratchpad data harvester:

Develop mechanisms within the scratchpads progressively to add structure to data feeding ultimately to the CDM

Explore the use of XMAL markup tools as a mechanism to capture structured data.

Components

C6.7 To develop a migration path for appropriate content from the scratchpads to the CDM (Month 29) (= > D11)

C6.8 Test and evaluate the taxonomic editor being developed by WP5 (=C5.74 Month 30) (= > D11)

C6.9 Report resulting from a workshop on web publication issues and IPR (Month 26)

Milestones and expected result

M6.24 WP6 exemplar group data migrated to CDM v1 (= 5.5.6; Month 33)

M6.30 Integrate the modules in the scratchpads to simplify the generation of species pages (Month 30)

M6.31 Critical evaluation of the first version of the Common Data Model (CDM, built by WP5) (= 5.2.9; Month 33)

M6.32 Integrate external data sources (e.g. digitised type specimen images) into the CDM (=5.2.9; Month 36)

M6.35 First MoU(s) with external data providers ready to be signed (Month 40)

M6.37 Evaluate and feedback on the module elements produced by WP5 (=5.5.7; 5.6.4; C5.79 Month 40)

M6.38 Evaluate progress in XML markup tools as mechanisms for data capture (Month 42)

6.2 Community building

Work package number	6	Start date or starting event:	4
Activity Type	Other specific activities		

Objectives

- Nurture and develop user communities in their use of web technology.
- Lower the level of expertise needed to manage web data such that control is placed within the community itself. This will enable long-term sustainability.
- Identify barriers to uptake or facilities needed to entice new user communities.
- Implement the CATE process model of community organisation to produce consensus taxonomic synopses in addition to full alternative classifications.

Description of work

6.2.1 Engage new communities

Develop the Cichorieae community.

Engage the European Network of Palm Scientists (EUNOPS).

Engage the European Network of Palm Scientists (EUNOPS).

Develop communities of entomologists in the Lepidoptera and Diptera and
 Cooperate with the LepTree and FLYTREE Tree of Life projects.
 Develop scratchpad communities by facilitating the use of the web by communities not currently doing so.

Components

C2.1.7 Data on experts associated with first batch of demonstrator group activities, coordinated by WP2 (Month 29) (=D10).
 C6.10 Report on discussions of the first version of the Data portal with the user communities (Month 29)

Milestones and expected result

M6.16 First version of the content structure of the Cichorieae web revision (Month 25)
 M6.21 Meeting of the Palm expert taxonomic network (Month 29)
 M6.25 Second version of the palm expert community scratchpad (Month 29)
 M6.27 Identify additional needs from the user community (Month 29)
 M6.28 First version of the dipterist community scratchpad (Month 29)
 M2.3.3 Symposium for existing taxonomic networks (in conjunction with WP1? (SAC chair) and WP4, coordinated by WP2 (Month tba [autumn 2008])
 M6.36 Offer an integrated suite of tools to facilitate data compilation. (Month 40)

6.3 Content delivery

Work package number	6	Start date or starting event:	4
Activity Type	Other specific activities		

Objectives

- Deliver taxonomic content to a public webpage from the CDM. This will require managing the level of user expertise to give both expert and novice access with equal facility.
- Deliver content not yet sufficiently structured to be incorporated into the CDM. This is important because contributors need the feedback of visibility. In this way data can be contributed and refined by a community and not only by individuals (see 6.2 above).
- Once on the web, it is essential that contributors can receive proper credit for their work. Therefore a metric of access is needed, broken down by access-type (individual not search engine, and by domain type, e.g.: .edu or .ac) and related to the contribution made to the site being accessed. To be of greatest utility, the same metric would be used by all taxonomic content providers so that it can be aggregated for managerial purposes.

Description of work

6.3.1 Evaluate portal:

Examine the portal as a mechanism to expose data from the CDM on the web, feeding back to the WP5 development team (=5.9.3)

6.3.2 Scratchpad SpeciesPages:

Enhance the scratchpad capacity for external data integration and display.

Develop tools within the scratchpad environment to display content prior to incorporation in the CDM.

6.3.3 Scratchpad exposé:

Develop API to export content to user communities.

6.3.4 Scratchpad Phase IV:

Integrate the requirements of the taxonomic communities, gathered through feedback from scratchpad maintainers.

Component

C6.11 Develop a metric in collaboration with other major content providers to provide a statistic usable in career management (Month 42)

Milestones and expected result

M6.33 Deliver an enhanced scratchpad capacity for external data integration and display (Month 36).

M6.39 Provide an API to scratchpad content (Month 33)

2.7 Workpackage 7: Applying Taxonomy to Conservation

Leader: SMNS, Christoph Häuser

Work package number		7		Start date or starting event:				0		
Activity Type				Other specific activities						
Participant id				CDC	MNHN	UKBH	CSIC-MNCN	UvA	NHN	NNM
Person-months per participant:				0	12	5	7	3	1	3
CBS	FUB-BGBM	NHML	RBGK	SMNS	RBINS	RMCA	NBGB	MIZPAN	IBPAN	
0	7	3	3	42	7	5	2	4	4	
HNHM	CUB	IBSAS	INRA	SMEBD	SP2000	BINRAS	ZINRAS	MO	USNM	MFN
10	10	4	1	2	1	1	3	2	3	1

Objectives

- Raise public awareness and strengthen use of European capacities for end-users of taxonomic information in biodiversity conservation, particularly for biodiversity inventories, assessments, and monitoring
- Mobilise and integrate European taxonomic expertise for undertaking and contributing to biodiversity inventories, assessments, and monitoring, especially in areas of conservation concern
- Develop and refine standards, techniques and tools for both rapid and repeated all taxa biodiversity inventories and monitoring (ATBI+M) programmes, for world wide application
- Establish a European ATBI+M task force for conducting biodiversity inventories, assessments and monitoring both within and outside Europe
- Provide and update comprehensive biodiversity inventories as a sound baseline for monitoring of selected areas of conservation concern, especially toward the 2010 target

Description of work

- 7.1 Assessing biodiversity inventory and monitoring needs, evaluating relevant taxonomic capacities, and raising stakeholder awareness
- 7.2 Mobilising taxonomic resources and establishing the ATBI+M task force network
- 7.3 Developing standards, protocols, and tools for conducting an ATBI+M programme
- 7.4 Operating the ATBI+M task force and evaluating relevant methods and techniques
- 7.5 Sustaining the European ATBI+M task force and long-term study sites

Components

- C7.1.5 Presentation of ATBI+M concept at international conference "Biodiversity Research – Safeguarding the Future" (Month 26, May 2008)
- C7.1.6 ATBI+M presentation at dedicated side event in support of the Global Taxonomy Initiative (GTI) at CBD COP9 (Month 26, May 2008)

C7.1.7 EDIT ATBI+M special flyer for outreach (Month 26, May 2008)

C7.1.8 Report from conservation managers and stakeholders meeting [in cooperation with WP1 & WP4] (Month 35, February 2009)

C7.2.3 Signed agreement for establishment of a second European ATBI+M pilot site (Month 25, April 2008)

C7.2.4 Signed agreement for establishment of a first non-European ATBI+M pilot site (Month 27, June 2008)

C7.2.5 Terms of reference for participation in first non-European ATBI+M pilot site (Month 28, July 2008)

C7.2.6 Material Transfer Agreement(s) (MTA) concluded for specimens and materials collected at first non-European ATBI+M pilot site (Month 30, September 2008)

C7.2.7 Coordination plan for human resource management and administration of ATBI+M task forces [in cooperation with WP2 and WP5] (Month 36, March 2009)

C7.2.8 Institutional agreement on participation of EDIT staff in ATBI+M activities following the EDIT template for institutional agreements (Month 42, September 2009)

C7.3.3 Online presentation of results from first field work at European ATBI+M pilot site (Month 25, April 2008)

C7.3.4 Report on first testing of automated geo-referencing and field recording equipment (Month 29, August 2008)

C7.3.5 Outline for manual on ATBI+M field recording techniques [in cooperation with WP4, = C4.3] (Month 31, October 2008)

C7.3.6 Establishment of a web-based forum for standardising particular field recording techniques in ATBI+M activities (Month 34, January 2009)

C7.3.7 Report on usability of ATBI map visualisation tools for ATBI+M scientists and stakeholders (Month 37, April 2009)

C7.3.8 Manual on ATBI+M field recording techniques [in cooperation with WP4] (Month 40, July 2009)

C7.4.3 Documentation of target taxa and applied inventory and monitoring techniques for established European ATBI+M pilot sites (Month 31, October 2008)

C7.4.4 Documentation of participation at established European ATBI+M pilot sites (Month 32, November 2008)

C7.4.5 Report of first field session of ATBI+M teams at established non-European pilot site (Month 35, February 2009)

C7.4.6 Report on inventory and monitoring activities at established European ATBI+M pilot sites (Month 36, March 2009)

C7.4.7 Content management system for ATBI+M administration and outreach implemented for every active ATBI+M pilot site (Month 37, April 2009)

C7.4.8 First review of methods and techniques applied at European ATBI+M pilot sites (Month 42, September 2009)

C7.5.2 Documentation on first ATBI outreach and promotion event for media and the public at PN Mercantour & PN Alpi Marittime (Month 29, August 2008)

C7.5.3 Criteria for the review of ATBI+M organisation and procedures (Month 30, September 2008)

C7.5.4 Status report of additional funding opportunities for longer term operation of established and planned ATBI+M pilot sites [in cooperation with WP3] (Month 33, December 2008)

C7.5.5 Survey from feedback of ATBI+M participants (Month 38, May 2009)

C7.5.6 Survey from user feedback of ATBI+M results by conservation community and stakeholders (Month 42, September 2009)

Milestones

M7.1.3 ATBI+M flyer-content discussed with WP1 communication officer (Month 24, March 2008)

M7.1.4 Registration for ATBI+M presentation at the international conference "Biodiversity Research –

Safeguarding the Future", 13-16 May 2008, Bonn (Month 24, March 2008)

M7.1.5 Registration for a GTI side event at the CBD COP9 (Month 24, March 2008)

M7.1.6 Planning discussion for workshop presenting ATBI+M concept to conservation managers and stakeholders [in cooperation with WP1 and WP4] (Month 27, June 2008)

M7.1.7 Workshop for presenting ATBI+M concept and first results to conservation managers and stakeholders [in cooperation with WP1 and WP4] (Month 33, December 2008)

M7.2.1 Meetings with relevant authorities for European ATBI+M pilot site(s) (ongoing)

M7.2.2 Meetings with relevant authorities for non-European ATBI+M pilot site(s) (ongoing)

M7.2.3 Draft Terms of reference for participation in first non-European ATBI+M pilot site (Month 26, May 2008)

M7.2.4 Draft Material Transfer Agreement(s) (MTA) for specimens and materials collected at first non-European ATBI+M pilot site (Month 27, June 2008)

M7.2.5 Data on taxonomic experts from first ATBI+M activities entered in WP2/WP5 information service (Month 29, August 2008)

M7.2.6 Draft institutional agreement on participation of EDIT staff in ATBI+M activities (Month 38, May 2009)

M7.3.4 Demonstrator of mapping tool for ATBI+M sites available (Month 24, March 2008)

M7.3.5 Field testing of automated geo-referencing and field recording equipment (Month 26-27, May-June 2008)

M7.3.6 List of contributors for manual on ATBI+M field recording techniques [in cooperation with WP4] (Month 27, June 2008)

M7.3.7 First data from ATBI+M pilot sites made available for testing of GIS tools [in cooperation with WP 5.4] (Month 28, July 2008)

M7.3.9 Beta version of GIS tool with first ATBI+M data online (Month 31, October 2008)

M7.3.9 Workshop for contributors to manual on ATBI+M field recording techniques [in cooperation with WP4] (Month 30, September 2008)

M7.3.10 Manuscripts delivered for manual on ATBI+M field recording techniques [in cooperation with WP4] (Month 33, December 2008)

M7.4.2 Inventory and monitoring activities at established first European ATBI+M pilot site continued (Months 25 – 31, April – October 2008)

M7.4.3 Field sessions at second European ATBI+M pilot site initiated (Month 25, April 2008)

M7.4.4 Field sessions at first non-European ATBI+M pilot site initiated (Month 30-33, September-December 2008)

M7.4.5 Data about target taxa and inventory techniques collected from participants at European ATBI+M pilot sites (Month 30, September 2008)

M7.4.6 Data about participation at European ATBI+M pilot sites collected and updated (Month 31, October 2008)

M7.5.3 Logistics prepared for first EDIT "summer school" training course at PN Mercantour & PN Alpi Maritime [in cooperation with WP8] (Month 25, April 2008)

M7.5.4 Draft review criteria for ATBI+M organisation and procedures discussed and developed [in cooperation with WP1] (Month 28, July 2008)

M7.5.5 First EDIT "summer school" training course conducted at PN Mercantour & PN Alpi Maritime [in cooperation with WP8] (Month 30, September 2008)

M7.5.6 Feedback on participation by ATBI+M team members in first EDIT "summer school" training course at PN Mercantour & PN Alpi Maritime [in cooperation with WP8, input for C8.3.1.2] (Month 31, October 2008)

M7.5.7 Draft funding proposals for expanding the ATBI+M field work, in cooperation with WP3 and other partners [in cooperation with WP1, WP3] (Month 31, October 2008)

M7.5.8 Distribution of ATBI+M results for feedback to conservation and other user communities (Month 32, November 2008)

M7.5.9 Feedback form for ATBI+M participants distributed (Month 34, January 2009)

7.1 Assessing biodiversity inventory and monitoring needs, evaluating relevant taxonomic capacities, and raising stakeholder awareness

Work package number	7	Start date or starting event:	Month 12
Activity Type	Other specific activities		

Objectives

- Raise public awareness and strengthen use of European capacities for end-users of taxonomic information in biodiversity conservation, particularly for biodiversity inventories, assessments, and monitoring
- Strengthen and support conservation planning and management in Europe, particularly toward successfully implementing Natura 2000
- Mobilise and integrate European taxonomic expertise for undertaking and contributing to biodiversity inventories, assessments, and monitoring, especially in areas of conservation concern

Description of work

7.1.1 Raise awareness, assess needs, and promote the establishment of an ATBI+M task force.

The lack of sound biodiversity inventories for many conservation areas will be used to further promote the ATBI+M approach, especially for conservation management and stakeholders. Additional partners from the conservation community will be approached for their inventory and monitoring needs at a special workshop, and awareness raising will continue during JPA3 through participation from WP7 at several international meetings and conferences ("Biodiversity Research – Safeguarding the Future", CBD COP9, IUCN World Parks Congress).

7.1.2 Assess current levels of biodiversity inventories and monitoring for selected areas of special conservation concern (including possible ATBI+M pilot sites). In collaboration with park management, relevant authorities, and ATBI participants, the available data from biodiversity inventories and monitoring will be compiled and assessed, specifically for conservation areas targeted as active or planned ATBI+M pilot sites. For these sites, available additional records from the literature and other sources will be mobilised and included in the ATBI+M databases as complementary efforts.

7.1.3 Assess taxonomic capacities and resources available in Europe for operation of an ATBI+M task force. In cooperation with WP2 and other partners, the available taxonomic expertise and work force for individual taxa and regions will continue to be recorded and assessed, with a particular focus on the specific needs of the active and proposed ATBI+M pilot sites.

7.1.4 Support implementation of the Global Taxonomy Initiative (GTI) in Europe. Inform and involve European GTI national focal points in EDIT activities and programmes, especially the ATBI+M programme. Actively participate in GTI meetings at the European and international level, and promote EDIT through the GTI Coordination Mechanism and other CBD bodies.

7.1.5 Expanding the ATBI+M network within and beyond EDIT. Increased participation in the ATBI+M activities at the established pilot sites by experts from EDIT partners, as well as other European institutions and organisations will be actively sought and promoted. Involvement in ATBI+M activities will be used for promoting EDIT outside its current membership, especially for European member states and regions without EDIT partners.

Components

C7.1.5 Presentation of ATBI+M concept at the international conference "Biodiversity Research – Safeguarding the Future" (Month 26, May 2008)

C7.1.6 ATBI+M presentation at dedicated side event in support of the Global Taxonomy Initiative (GTI) at CBD COP9 (Month 26, May 2008)

C7.1.7 EDIT ATBI+M special flyer for outreach (Month 26, May 2008)
 C7.1.8 Report from conservation managers and stakeholders meeting [in cooperation with WP1 & WP4] (Month 35, February 2009)

Milestones

M7.1.3 ATBI+M flyer-content discussed with WP1 communication officer (Month 24, March 2008)
 M7.1.4 Registration for ATBI+M presentation at the international conference "Biodiversity Research – Safeguarding the Future", 13-16 May 2008, Bonn (Month 24, March 2008)
 M7.1.5 Registration for a GTI side event at the CBD COP9 (Month 24, March 2008)
 M7.1.6 Planning discussion for workshop presenting the ATBI+M concept to conservation managers and stakeholders [in cooperation with WP1 and WP4] (Month 27, June 2008)
 M7.1.7 Workshop for presenting the ATBI+M concept and first results to conservation managers and stakeholders [in cooperation with WP1 and WP4] (Month 33, December 2008)

7.2 Mobilising taxonomic resources and establishing the ATBI+M task force network

Work package number	7	Start date or starting event:	Month 12
Activity Type	Other specific activities		

Objectives

- Mobilise and integrate European taxonomic expertise for undertaking and contributing to biodiversity inventories, assessments, and monitoring, especially in areas of conservation concern
- Establish a European ATBI+M task force for conducting biodiversity inventories, assessments and monitoring both within and outside Europe

Description of work

- 7.2.1 Develop criteria, guidelines and agreements for operation of ATBI+M task force and pilot sites.** Following the development of template agreements for establishment of ATBI+M pilot sites and of general guidelines for participation, financial support, and data delivery by participants, agreements and guidelines have to be modified for each pilot site to be established and to become operational.
- 7.2.2 Establish and integrate taxonomic assessment teams for ATBI+M task force.** Depending on expressed inventory and monitoring needs and priorities for individual sites, as well as the interests and availability of specialists, different teams have to be assembled for each ATBI+M pilot site. With increasing participation, tools and mechanisms for management and administration of individual specialists will be adapted and implemented.
- 7.2.3 Establishment of ATBI+M pilot sites in Europe.** Following the successful establishment of a first European ATBI+M pilot site at the Natural Parks Mercantour and Alpi Marittime, negotiations for starting a second pilot site in Slovakia have been successfully completed. Further European candidate sites proposed will be followed up, depending on interests by park authorities and available resources. This will involve further meetings and continued negotiations with relevant authorities and counterparts.
- 7.2.4 Establishment of ATBI+M pilot sites outside Europe, preferably in biodiversity-rich developing countries.** A first non-European ATBI+M pilot site will be established during JPA3, following signed agreements (MoU, MTA) with the relevant counterparts and local authorities. This will involve further meetings and continued negotiations with relevant authorities and counterparts.

Components

C7.2.3 Signed agreement for establishment of a second European ATBI+M pilot site (Month 25, April 2008)

C7.2.4 Signed agreement for establishment of a first non-European ATBI+M pilot site (Month 27, June 2008)

C7.2.5 Terms of Reference for participation in first non-European ATBI+M pilot site (Month 28, July 2008)

C7.2.6 Material Transfer Agreement(s) (MTA) concluded for specimens and materials collected at first non-European ATBI+M pilot site (Month 30, September 2008)

C7.2.7 Coordination plan for human resource management and administration of ATBI+M task forces [in cooperation with WP2 and WP5] (Month 36, March 2009)

C7.2.8 Institutional agreement on participation of EDIT staff in ATBI+M activities following the EDIT template for institutional agreements (Month 42, September 2009)

Milestones

M7.2.1 Meetings with relevant authorities for European ATBI+M pilot site(s) (ongoing)

M7.2.2 Meetings with relevant authorities for non-European ATBI+M pilot site(s) (ongoing)

M7.2.3 Draft Terms of Reference for participation in first non-European ATBI+M pilot site (Month 26, May 2008)

M7.2.4 Draft Material Transfer Agreement(s) (MTA) for specimens and materials collected at first non-European ATBI+M pilot site (Month 27, June 2008)

M7.2.5 Data on taxonomic experts from first ATBI+M activities entered in WP2/WP5 information service (Month 29, August 2008)

M7.2.6 Draft institutional agreement on participation of EDIT staff in ATBI+M activities (Month 38, May 2009)

7.3 Developing standards, protocols, and tools for conducting an ATBI+M programme

Work package number	7	Start date or starting event:	Month 12
Activity Type	Other specific activities		

Objectives

- Mobilise and integrate European taxonomic expertise for undertaking and contributing to biodiversity inventories, assessments, and monitoring, especially in areas of conservation concern.
- Develop and refine standards, techniques and tools for both rapid and repeated all taxa biodiversity inventories and monitoring (ATBI+M) programmes, also for world wide application.

Description of work

7.3.1 Selection of target taxa for ATBI+M and recording techniques and protocols.

7.3.2 Establish data repositories for ATBI+M teams and sites.

7.3.3 Innovative tools for data access and data exchange.

7.3.4 Specification, data provision and testing of GIS-tools for ATBI+M needs

Components

C7.3.3 Online presentation of results from first field work at European ATBI+M pilot site (Month 25, April 2008)

C7.3.4 Report on first testing of automated geo-referencing and field recording equipment (Month 29, August 2008)

C7.3.5 Outline for manual on ATBI+M field recording techniques [in cooperation with WP4, = C4.3] (Month 31, October 2008)
 C7.3.6 Establishment of a web-based forum for standardising particular field recording techniques in ATBI+M activities (Month 34, January 2009)
 C7.3.7 Report on usability of ATBI map visualisation tools for ATBI+M scientists and stakeholders (Month 37, April 2009)
 C7.3.8 Manual on ATBI+M field recording techniques [in cooperation with WP4] (Month 40, July 2009)

Milestones

M7.3.4 Demonstrator of mapping tool for ATBI+M sites available (Month 24, March 2008)
 M7.3.5 Field testing of automated geo-referencing and field recording equipment (Month 26-27, May-June 2008)
 M7.3.6 List of contributors for manual on ATBI+M field recording techniques [in cooperation with WP4] (Month 27, June 2008)
 M7.3.7 First data from ATBI+M pilot sites made available for testing of GIS tools [in cooperation with WP 5.4] (Month 28, July 2008)
 M7.3.9 Beta version of GIS tool with first ATBI+M data online (Month 31, October 2008)
 M7.3.9 Workshop for contributors to manual on ATBI+M field recording techniques [in cooperation with WP4] (Month 30, September 2008)
 M7.3.10 Manuscripts delivered for manual on ATBI+M field recording techniques [in cooperation with WP4] (Month 33, December 2008)

7.4 Operating the ATBI+M task force and evaluating relevant methods and techniques

Work package number	7	Start date or starting event:	Month 12
Activity Type	Other specific activities		

Objectives

- Develop and refine standards, techniques and tools for both rapid and repeated all taxa biodiversity inventories and monitoring (ATBI+M) programmes, also for world wide application.
- Establish a European ATBI+M task force for conducting biodiversity inventories, assessments and monitoring both within and outside Europe.

Description of work

7.4.1 Conduct ATBI+M approach at selected terrestrial and/or marine pilot sites in Europe. Field work at the first European ATBI+M pilot site (PN Mercantour / PN Alpi Marittime) will be scaled up, and initiated at least at a second pilot site in Europe (Slovakia, Gemer region).
7.4.2 Conduct ATBI+M approach at selected terrestrial and/or marine non-European pilot sites, preferably in biodiversity-rich developing countries. Following the establishment of a first non-European ATBI+M pilot site, initial field work will be conducted by ATBI+M teams during JPA3.
7.4.3 Testing and application of innovative information management tools for biodiversity conservation (>M35).

Components

C7.4.3 Documentation of target taxa and applied inventory and monitoring techniques for established European ATBI+M pilot sites (Month 31, October 2008)
 C7.4.4 Documentation of participation at established European ATBI+M pilot sites (Month 32, November 2008)

C7.4.5 Report of first field session of ATBI+M teams at established non-European pilot site (Month 35, February 2009)

C7.4.6 Report on inventory and monitoring activities at established European ATBI+M pilot sites (Month 36, March 2009)

C7.4.7 Content management system for ATBI+M administration and outreach implemented for every active ATBI+M pilot site (Month 37, April 2009)

C7.4.8 First review of methods and techniques applied at European ATBI+M pilot sites (Month 42, September 2009)

Milestones

M7.4.2 Inventory and monitoring activities at established first European ATBI+M pilot site continued (Months 25-31, April - October 2008)

M7.4.3 Field sessions at second European ATBI+M pilot site initiated (Month 25, April 2008)

M7.4.4 Field sessions at first non-European ATBI+M pilot site initiated (Month 30-33, September - December 2008)

M7.4.5 Data about target taxa and inventory techniques collected from participants at European ATBI+M pilot sites (Month 30, September 2008)

M7.4.6 Data about participation at European ATBI+M pilot sites collected and updated (Month 31, October 2008)

7.5 Sustaining the European ATBI+M task force and long-term study sites

Work package number	7	Start date or starting event:	Month 12
Activity Type	Other specific activities		

Objectives

- Provide and update comprehensive biodiversity inventories as a sound baseline for monitoring of selected areas of conservation concern, especially Toward the 2010 target.
- Strengthen and support conservation planning and management in Europe, particularly Toward successfully implementing Natura2000.

Description of work

7.5.1 Outreach and capacity building for ATBI+M approach

7.5.2 Review efficiency and performance of ATBI+M task force and sites (>M18)

7.5.3 Develop long-term organisational structure(s) for sustaining ATBI+M task force and site management (>M24)

7.5.4 Explore additional funding opportunities for ATBI+M activities (>M12)

Components

C7.5.2 Documentation on first ATBI outreach and promotion event for media and the public at PN Mercantour & PN Alpi Marittime (Month 29, August 2008)

C7.5.3 Criteria for the review of ATBI+M organisation and procedures (Month 30, September 2008)

C7.5.4 Status report of additional funding opportunities for longer term operation of established and planned ATBI+M pilot sites [in cooperation with WP3] (Month 33, December 2008)

C7.5.5 Survey from feedback of ATBI+M participants (Month 38, May 2009)

C7.5.6 Survey from user feedback of ATBI+M results by conservation community and stakeholders (Month 42, September 2009)

Milestones

M7.5.3 Logistics prepared for first EDIT "summer school" training course at PN Mercantour / PN

Alpi Marittime [in cooperation with WP8] (Month 25, April 2008)
M7.5.4 Draft review criteria for ATBI+M organisation and procedures discussed and developed [in cooperation with WP1] (Month 28, July 2008)
M7.5.5 First EDIT "summer school" training course conducted at PN Mercantour / PN Alpi Marittime [in cooperation with WP8] (Month 30, September 2008)
M7.5.6 Feedback on participation by ATBI+M team members in first EDIT "summer school" training course at PN Mercantour / PN Alpi Marittime [in cooperation with WP8, input for C8.3.1.2] (Month 31, October 2008)
M7.5.7 Draft funding proposals for expanding the ATBI+M field work, in cooperation with WP3 and other partners [in cooperation with WP1, WP3] (Month 31, October 2008)
M7.5.8 Distribution of ATBI+M results for feedback to conservation and other user communities (Month 32, November 2008)
M7.5.9 Feedback form for ATBI+M participants distributed (Month 34, January 2009)

2.8 Workpackage 8: Training and Public Awareness

Leader: RBINS, Jackie van Goethem

Work package number		8		Start date or starting event:				0		
Activity Type				Other specific activities						
Participant id				CDC	MNHN	UKBH	CSIC-MNCN	UvA	NHN	NNM
Person-months per participant:				0	2,5	2	0,5	1	8	1,5
CBS	FUB-BGBM	NHML	RBGK	SMNS	RBINS	RMCA	NBGB	MIZPAN	IBPAN	
0,75	1	6	0,5	1,5	52	13,5	11,5	2	0,2	
HNHM	CUB	IBSAS	INRA	SMEBD	SP2000	BINRAS	ZINRAS	MO	USNM	MfN
0,2	0,2	1	0,2	0	0	0,2	0,2	0,2	0,2	

Objectives

General

Transfer knowledge between current and future generations of taxonomists.
Spread this knowledge by streamlining the training offer in Europe and establishing an integrated Training programme (DEST: Distributed European School of Taxonomy).

A. Training

Assess European strengths and weaknesses in the current offer of training in taxonomy.
Improve dissemination of information on training opportunities.
Promote collaboration between training providers and encourage them to participate into DEST.
Establish mechanisms for integration of training resources into DEST.
Develop student and professional access to the DEST and provide opportunities for training.

B. Public Awareness

Raise public awareness on key issues in taxonomy.
Sustain PR activities of EDIT.
Integrate EDIT partners' staff devoted to the disseminating of scientific knowledge.

Description of work

8.0 Integration with other workpackages

8.1 Assessment of the training resources for taxonomy in Europe

8.2 Mobilisation of European training providers into the Distributed European School of Taxonomy

8.3 Establishment of pilot schemes for integration

8.4 Implementation of the Distributed European School of Taxonomy

8.5 Public awareness for the promotion of taxonomy

Components

C8.0 Areas of responsibility outlined and made available on EDIT website (Month 35)

C8.1.4 Proposal for an interactive online catalogue of training resources for taxonomy, updateable by all concerned parties (Month 35)

C8.2.2 Progress report on the draft course prospectus (Month 28)

C8.3.1.1 Outline and curriculum for first "summer school" training course(s) at European ATBI+M pilot sites agreed upon (Month 24)

C8.3.1.2 Report on the first Summer School (Month 32)

C8.3.1.3 Outline and curriculum of second "summer school" training course(s) at European ATBI+M pilot sites (Month 35)

C8.3.2.1 Interim report on the pilot expert in training programme (Month 30)

C8.3.2.2 Progress report on the pilot expert in training programme (Month 34)

C8.4.1.1 Text of the draft course prospectus, ready for its consideration by the BoD (Month 33)

C8.4.1.2 Draft agreement on course prospectus of the DEST (Month 41).

C8.5.1 Overview of existing taxonomy-based education programmes NHM and BG and recommendations for all EDIT partners (M26)

C8.5.2 Report on "How to communicate taxonomy?" with best practices and success stories useful for the PR strategy (WP1) (Month 26)

C8.5.3 Work programme for designing common public awareness activities at the 2010 horizon concerning all EDIT partners (Month 32)

C8.5.4 Report to the BoD on integrated approaches of PA activities Toward 2010 and beyond (Month 33)

C8.5.5 Recommendations and guidelines for integrated approaches of PA activities Toward 2010 and beyond (Month 35)

Milestones

M8.0 To establish common work plans with all workpackages WP1-WP7 (Month 35)

M8.2 First meeting of committee of training providers willing to participate in the DEST (Month 26)

M8.3 Expert-in-training programme is operational (Month 26)

M8.4 First Summer School is conducted at European ATBI+M sites in liaison with WP7 (Month 30)

M8.6 Workshop on "How to communicate taxonomy?" (Month 24)

M8.7 Dissemination of information on training resources in taxonomy on the EDIT web portal (From Month 20 onward)

M8.8 Second Summer School is conducted at European ATBI+M sites in liaison with WP7 (Month 41)

M8.9 Second meeting of committee of training providers (Month 38)

M8.10 BoD Meeting with PA report on agenda (Month 34)

M8.11 MoU on PA (Month 41)

8.0 Integration with other workpackages

Work package number	8	Start date or starting event:	12
Activity Type	Other specific activities		

Objectives

- Coordinate activities in WP8 with other workpackages to maximise benefit and minimise duplication of effort.
- Define areas of responsibility within an overall EDIT strategy.

Description of work

8.0.1 To engage with WP1 on complementarities between PR & PA

8.0.2 To engage with WP2 on relation between information service and database on training resources and to assess training requirements arising from expertise gaps

8.0.3 To engage with WP3 on information exchange on DNA-barcoding for training opportunities
8.0.4 To engage with WP4 to assess training requirements arising from research needs/priorities and identify synergy between users needs and trainees needs
8.0.5 To engage with WP5 to develop geospatial training courses and e-learning possibilities
8.0.6 To engage with WP6 to plan training in use of scratchpads
8.0.7 To engage with WP7 to develop Summer Schools and related PA activities

Components

C8.0 Areas of responsibility outlined and made available on EDIT website (Month 35)

Milestones and expected result

M8.0 To establish common work plans with all workpackages WP1-WP7 (Month 35)

8.1 Assessment of training resources for taxonomy in Europe

Work package number	8	Start date or starting event:	Month 0
Activity Type	Other specific activities		

Objectives

- Evaluate European strengths and weaknesses in the current offer of training in taxonomy.

Description of work

8.1.1 Listing of training resources provided by EDIT and non-EDIT training providers

8.1.2 Evaluation of the gaps and needs for training, including short-term priorities

8.1.3 Online catalogue of training resources for taxonomy

The online catalogue can be found on the EDIT website and is available on CD-ROM. A gap analysis is published on the EDIT website and reveals the current status of the training offer in taxonomy in Europe and highlights the challenges that these training courses will have to face to meet the needs of the 'twenty-first century' taxonomy.

8.1.4 Updateable online catalogue

An updateable online catalogue of existing training resources will be made available on the EDIT website [link with WP1]. Long-term sustainability beyond EDIT should be envisaged.

Components

C8.1.4 Proposal for an interactive online catalogue of training resources for taxonomy, updateable by all concerned parties (Month 35)

Milestones and expected result

M8.7 Dissemination of information on training resources in taxonomy on the EDIT web portal (From Month 20 onward)

8.2 Mobilisation of training providers into the Distributed European School of Taxonomy

Work package number	8	Start date or starting event:	Month 6
Activity Type	Other specific activities		

Objectives

- Promote collaboration between training providers and encourage them to participate in the

DEST, with the view to establish mechanisms for integration of training resources.

Description of work

8.2.1

- a) Establishment of a strategy for mobilising training providers (EDIT and non-EDIT partners) into the Distributed European School of Taxonomy (DEST) [Link with BoD and WP1];
- b) Identification of training providers interested in participating in the DEST.

8.2.2

- a) Launch of a call for the mobilisation of training providers; [Link with BoD and WP1];
- b) Establishment of committee of training providers (members, mandate, identify terms of reference, etc.);
- c) Identification of ways and means for integration, including the application of the Bologna agreement and the way doctoral schools are organised in different countries.

8.2.3

- a) Organisation of the first meeting of the Committee of training providers to adopt general principles of integration and discussions on a draft course prospectus (curriculum, process for student participation, recognition and accreditation of the courses, etc.);
- b) Review and finalise the decisions taken during the first meeting.

Activities will involve consultations with course managers within EDIT and beyond, the investigation of training initiatives in other countries (e.g. US PEET programme), the investigation of means of integrating training and of current structures (Bologna agreement, Open University, Ecole des Métiers), the negotiation of conditions for integration. Operation 8.2.1 will be carried out in parallel with operations 8.1.1 and 8.1.2 (Assessment of training resources). Operation 8.2.3 will work in close links with the Board of Directors.

Components

C8.2.2 Progress report on the draft course prospectus to the BoD (Month 26)

Milestones

M8.2 First meeting of Committee of training providers willing to participate in the DEST (Month 24)

8.3 Pilot schemes for integration

Work package number	8	Start date or starting event:	Month 3
Activity Type	Other specific activities		

Objectives

- Develop student and professional access to the DEST and provide opportunities for training.

Description of work

8.3.1 Summer school programme

The development of a summer school programme will add a special value to the DEST. It will also serve as a flagship initiative to increase the students' interest in taxonomy and raise the awareness of the general public.

Summer school programme will combine theoretical topics and fieldwork. In view of this, the focus of the taxon-oriented pilot course would be general topics on taxonomy and field related items. [The Summer School activities will be linked with WP7 ATBI+M.]

8.3.2 Pilot 'expert-in-training' programme

The pilot 'expert-in-training' programme will build on existing experiences (e.g.: PEET, doctoral schools). Based on the concept of 'traineeship', the programme will combine both on and off the job

training. Therefore, the acquisition of skills will allow students to become aware of the diversity of research through practical experiences and hands-on training. The sharing of experiences will be made possible through EDIT's web portal.

Components

C8.3.1.1 Outline and curriculum for first "summer school" training course(s) at European ATBI+M pilot sites (Month 24)

C8.3.1.2 Report on the first Summer School (Month 32)

C8.3.1.3 Outline and curriculum for second "summer school" training course(s) at European ATBI+M pilot sites (Month 35)

C8.3.2.1 Interim report on the pilot expert in training programme (Month 30)

C8.3.2.2 Progress report on the pilot expert in training programme (Month 34)

Milestones and expected result

M8.3 Expert-in-training programme is operational (Month 26)

M8.4 First Summer School is conducted at European ATBI+M sites in liaison with WP7 (Month 30)

M8.8 Second Summer School is conducted at European ATBI+M sites in liaison with WP7 (Month 41)

8.4 Implementation of EDIT's Distributed European School of Taxonomy

Work package number	8	Start date or starting event:	Month 29
Activity Type	Other specific activities		

Objectives

- Model curriculum of Distributed European School of Taxonomy (DEST) is established.

Description of work

8.4.1 Integration of the European training resources into DEST

Activity 8.4 takes the relay of Activity 8.2. After the mobilisation of training providers and the discussions on a draft course prospectus in 8.2., the 8.4 activity aims to finalise the proposal and submit it to the Board of Directors. This 'final draft' course prospectus will include the list of courses, conditions for participation, certification and accreditation of the courses, granting possibilities, online study resources, etc. Taking into account the time needed for the participatory processes, this task will strive to achieve a draft agreement and to define the conditions allowing the signature of a formal agreement. Activity 8.4 will also plan the practical implementation of the DEST.

Organisation of the second meeting of the Committee of training providers, to review and finalise the decisions taken during the first meeting.

[Activity 8.4 will involve the same partners as in 8.2 + all EDIT members will be able to take part to the implementation phase]

Components

C8.4.1.1 Text of the draft course prospectus, ready for its consideration by the BoD (Month 33)

C8.4.1.2 Draft agreement on course prospectus of the DEST (Month 41)

Milestones

M8.9 Second meeting of Committee of training providers willing to participate in the DEST (Month 38)

8.5 Public Awareness for the promotion of Taxonomy

Work package number	8	Start date or starting event:	Month 12
Activity Type	Other specific activities		

Objectives

- Raise public awareness on key issues in taxonomy.
- Sustain PR activities of EDIT.
- Integrate EDIT partners' staff devoted to the disseminating of scientific knowledge.

Description of work

8.5.1. Inventory of existing taxonomy-based museum programmes and resources in natural history museums (NHM) and botanic gardens (BG)

This inventory and qualitative mapping will include galleries content management, temporary exhibition development, description of education programmes, nature workshops (indoor/outdoor), guided tours, conferences and debates etc.

8.5.2 Workshop on communicating taxonomy

Organisation of a workshop on “How to communicate taxonomy?” including EDIT and non-EDIT experts. Official representatives from Alter-NET and Marbef will be required to transfer experiences already engaged in PA of biodiversity. The workshop targets personnel working in educational and museum departments, or taxonomists in charge of developing education and public awareness activities for their institutions. It will serve to exchange experiences and best practices. It will lead to a report compiling analysis of best practices including a catalogue of examples and a selection of “success stories”.

8.5.3 Planning for the 2010 Biodiversity Year Special Events

The year 2010 has been designated as the international year for biological diversity by the United Nations. It will also be the time when the 2010 targets will have to be evaluated (i.e. ‘halt the loss of biodiversity by 2010). EDIT offers the opportunity to develop synergies and common activities (sharing of content; simultaneous events, co-production, touring, exchanges of products) between the partners and toward non-EDIT NHM and Science Centers. As far as possible, the 2010 BYSE will seek to promote a non-already seen use of the specimens from the collections.

8.5.4 Definition of integrated approaches of PA activities Toward 2010 and beyond.

A selection of 2010 PA activities, such as those listed in 8.5.3, is closely examined together with relevant partners in order to extract synergic approaches.

From 8.5.2, a set of new integrated activities is designed to support the 2010 BYSE.

A report presenting the concepts, the tools and the means necessary for integration of PA is prepared for BoD and SAC (with annexes on concrete upcoming actions).

8.5.5 Preparation of EDIT's MoU for integration of PA activities Toward 2010 and beyond.

Following the comments of BoD and SAC, and with the approval of relevant partners, conclusions are formulated on 'Recommendations and guidelines' for integration of PA on the long-term. A draft MoU is also submitted to the BoD.

Components

C8.5.1 Overview of existing taxonomy-based education programmes NHM and BG and recommendations for all EDIT partners (M26)

C8.5.2 Report on “How to communicate taxonomy?” with best practices and success stories useful for the PR strategy (WP1) (Month 26)

C8.5.3 Work programme for designing common public awareness activities at the 2010 horizon concerning all EDIT partners (Month 32)

C8.5.4 Report to the BoD on integrated approaches of PA activities Toward 2010 and beyond (Month 33)

C8.5.5 Recommendations and guidelines for integrated approaches of PA activities Toward 2010 and beyond (Month 35)

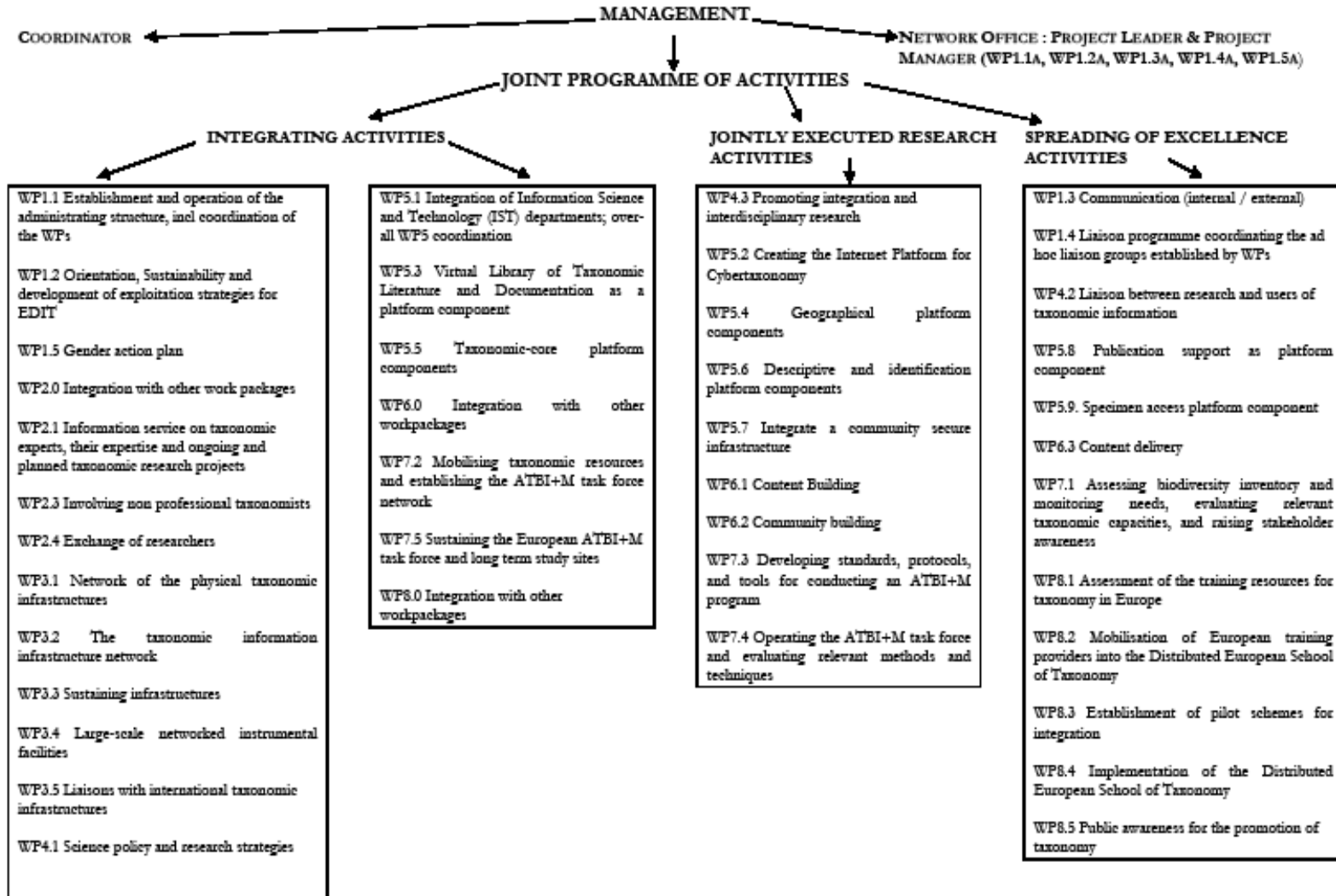
Milestones and expected result

M8.6 Workshop on “How to communicate taxonomy?” (Month 24)

M8.10 BoD meeting with PA report on agenda (Month 34)

M8.11 MoU on PA (Month 41)

Section 3: Graphical presentation of workpackages



Section 4: Deliverables list

Deliverables list
Joint programme of activities (18 months period, month 24 - 41)

Del. no.	Deliverable name	Lead participant	Nature	Dissemination level	Delivery date (proj. month)
D4	Preliminary analysis of possible designs for the EDIT as a supranational entity	Wouter Los (UVA) / Leo Kriegsman (NNM)	R	PU	Month 26
D6	1 st report on the analysis of changes in collaborative taxonomic work processes	Henrik Enghoff (UKBH)	R	PU	Month 26
D8	Summary analysis on user groups and their needs	Marian Ramos (CSIC – MNCN)	R	PU	Month 35
D10	1 st report on an Integrated recruitment strategy of taxonomy	Henrik Enghoff (UKBH)	R	PP	Month 35
D11	V1 of the EDIT platform for cybertaxonomy	Walter Berendsohn (FUB-BGBM)	web service	PU	Month 32
D12	1 st report on EDIT Scientific output	Dave Roberts (NHML)	R	PU	Month 40
D13	First report on Integrated Training for taxonomy	Jackie Van Goethem (RBINS)	R	PU	Month 41
D14	1 st report on implementation of communication and PR strategy	Simon Mayo (RBGK)	R	PP	Month 35
D15	Elements for research policy – new strategies for Taxonomy	Chair of SPG	Plan	PP	Month 35
D16	Mechanism for Identifying Funding Opportunities and Streamlining Response	Leo Kriegsman (NNM)	R	PP	Month 40
D17	Second analysis of possible designs for European Distributed Institute of Taxonomy as a supranational entity	Leo Kriegsman (NNM)	R	PP	Month 42
D19	Integrated administrative and managerial structure of EDIT	Simon Tillier (MNHN)	Agreement	PU	Month 59
D20	Version 2 of the Internet platform for Cybertaxonomy	Walter Berendsohn (FUB-BGBM)	web service	PU	Month 41
D21	Version 3 of the Internet platform for Cybertaxonomy	Walter Berendsohn (FUB-BGBM)	web service	PU	Month 54
D22	Report on progress toward stakeholder forum	WP4	R	PU	Month 47

Del. no.	Deliverable name	Lead participant	Nature	Dissemination level	Delivery date (proj. month)
D23	Operational Pilot Information Service on European Taxonomic Workforce	Henrik Enghoff (UKBH)	Web service	PU	Month 36
D24	Updated Roadmap	Simon Tillier (MNHN)	Plan	PU	Month 35

Section 5: Indicative budget for the next 18 months²

WP 3rd JPA Month 24 - 41	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	CDC	MNHN	UKBH	CSJC - MINCN	UvA	NHN	NNM	CBS	FUB - BGBM	NHML	RBGK	SMNS	RBINS	RMCA	NBGB
Equipment	0	0	0	0	0	0	0	0	0	0	0	12 000	1 200	0	0
Consumables	0	6 600	3 000	1 800	0	0	3 000	0	1 800	22 049	4 320	6 750	3 000	4 200	1 200
Workshops and Meetings	0	47 030	11 310	17 630	15 480	14 040	32 430	21 600	36 030	30 862	19 054	48 630	21 630	7 680	5 880
Additional Personnel	0	422 208	78 000	141 600	105 600	34 200	131 100	66 000	832 440	365 891	217 821	337 500	252 000	80 550	36 000
Subcontracting	0	0	0	0	0	0	9 000	0	0	0	0	0	0	0	0
Other	122 231	12 000	3 000	0	0	0	0	0	0	3 000	0	4 500	0	0	0
To be granted to rel. Activ.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total EC endowment	122 231	487 838	95 310	161 030	121 080	48 240	175 530	87 600	870 270	421 802	241 195	409 380	277 830	92 430	43 080
In which management															
PMs	9	133,3	27,95	48,25	49,15	24,6	31,65	18,75	204,75	129,45	78,2	72,65	74,75	38,4	17,2

WP 3rd JPA Month 24 - 41	16	17	18	19	20	21	22	23	24	25	26	27	28	To be granted to Relevant Partners	Total
	MIZPAN	IBPAN	HNHM	CUB	IBSAS	INRA	SMEBD	SP2000	BINRAS	ZINRAS	MO	USNM	MfN		
Equipment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13 200
Consumables	3 000	0	600	4 200	1 200	0	0	0	0	0	0	0	0	15 000	81 719
Workshops and Meetings	2 880	1 080	2 880	18 480	4 680	1 080	1 080	1 080	480	480	0	0	480	279 470	643 436
Additional Personnel	20 250	0	7 680	24 006	9 006	0	0	0	0	0	0	0	0	71 400	3 233 251
Subcontracting	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9 000
Other	0	0	0	0	0	0	0	0	0	0	0	0	4 000	38 700	187 431
To be granted to rel. Activ.	0	0	0	0	0	0	0	0	0	0	0	0	0	146 000	146 000
Total EC endowment	26 130	1 080	11 160	46 686	14 886	1 080	1 080	1 080	480	480	0	0	4 480	550 570	4 314 038
In which management															
PMs	17,8	5,9	13,9	29,4	21,2	5,4	5,8	3,2	4,9	4,4	3,1	4,4	3,65		1081,1

² This budget takes into account the funds already transferred and not accepted as eligible cost (=grant available for the third JPA).

ANNEX 1: Mapping of components³ to new project deliverables and general objectives

Deliverable number	General Objective	Component number	Component title	Date due
D4: Preliminary analysis of possible designs for the EDIT as a supranational entity (M26)	1, 2, 3	C3.1.1	First design report of integrated physical infrastructures	M 25
	3, 5	C3.5.1	List of relevant networks	M23
	3,5	C3.5.2	Proposal outline for an EDIT communication mechanism for cooperation and information exchange with other international networks and infrastructures	M23
D6: First report on the analysis of changes in collaborative taxonomic work processes (M26)	1,3,4	C7.2.5	Terms of Reference for participation in first non-European ATBI+M pilot site	M 28
	2, 4	C7.4.3	Documentation of target taxa and applied inventory and monitoring techniques for established European ATBI+M pilot sites	M 31
	2,4,6	C7.3.4	Report on first testing of automated georeferencing and field recording equipment	M29
	1,3,4	C7.4.4	Documentation of participation at established European ATBI+M pilot sites	M32
D8: Summary analysis on user groups and their needs (M35)	5	C4.2.1	Report on the results of questionnaire of thematic services of EDIT taxonomic institutions based on their social function	M 28
	5	C4.2.2	Report on case-studies of users-scientists collaborations in EDIT institutions. Second report on stakeholders of taxonomy and their need	M 31
	5	C4.2.6	Report on bibliometric methodologies as tool to map a part of the users of taxonomy	M35
	5	C.4.2.7	Report on user needs and openings for (long)-lasting collaboration with users of taxonomic information	M41
	1, 5	C2.3.3 / C4.2.8	Report on guidelines on how to meet mutual needs of non professional and professional taxonomists	M28
	2,5	C7.1.8	Report from conservation managers and stakeholdes meeting	M35
D10: 1st report on an Integrated recruitment strategy of taxonomy (M35)		C2.1.8	Gap-analysis on taxonomic expertise in EDIT	M35

³ Components are not part of the EC Contract n°018340.

Deliverable number	General Objective	Component number	Component title	Date due
D11: V1 of the EDIT platform for cybertaxonomy (M32)	2,4,6	C5.41	Documentation for GIS webapplication available	M30
	1, 3, 5	C5.23	a set of use template or example agreements and/or licences for use with suppliers	M25
	1,3,4	C5.27	Pilot website for OpenURL available	M30
	1,3,4	C5.28	Portal prototype functional for machine access to Metadatabase	M30
	1,3,4	C5.29	Pilot of Metalib for human and machine access	M30
	3,4	C5.55	Platform environment circumscribed based on existing standards	M25
	4	C5.56	Interface to CDM community store implemented and usable within the platform	M29
	1,2,3,4,6	C5.57	First CDM Framework Implementation available	M30
	2,4,6	C5.64	Global background maps available in printing quality	M24
	2,4,6	C5.65	Point (occurrence) map generation webservice for online and print quality maps released and online available.	M26
	2,4,6	C5.66	Regional distribution map generation webservice for online and print quality maps released and online available.	M28
	2,4,6	C5.67	Map generation webservices enhanced for Publication ready maps (print quality)	M30
	2,4,6	C5.68	API Documentation for map generation webservices available	M31
	2,3,4	C5.74 / C6.8	Specification of concept-related workflows to be supported by the taxonomic editor (wiki site)	M30
	2,3,4	C5.75	V1.0 of the CDM taxonomic editor available (software)	M30
	2,3,4	C5.79	Import/Export module for CDM v.1 (Software)	M32
	1,2,3,4	C5.82	Specification of CSSO profiles for the platform covering the use cases web application, web service and desktop application	M27
	1,2,3,4	C5.83	Setup the initial CSSO security infrastructure for the platform	M29
	1,2,3,4	C5.84	Integrate the CSSO Identity Provider component with the Experts-DB	M29
	1,2,3,4,6	C5.86	Data portal prototype	M26
	4	C5.87	WP6 exemplar group data migrated to CDM v1	M26
	2, 3, 4	C5.91	CDM storage functionality implemented	M31
	2,4	C6.7	To migrate the contents of the scratchpads to the Communication Tool +	M29
2	C6.9	Report resulting from a workshop on web publication issues on IPR	M26	
4,5,6	C6.10	Report on discussions of the first version of the Data Portal with the user communities	M29	

Deliverable number	General Objective	Component number	Component title	Date due
	2, 4	C3.2.1	Contribution to the Global Name Architecture (GBIF/ECAT white paper)	M 25
	2, 3, 4	C5.89	List of data items and searchable data items in existing portals	M26
	4	C5.90	Inclusion of missing data items in GBIF index	M27
	1,2,3,4,6	C5.50	Report on integration of descriptive tools into the Platform	M29
D12: First report on EDIT Scientific output (M40)	2,6	C4.3.4	Contents for a Manual reviewing field methods and innovative techniques for innovative ATBI+M work (in collaboration with WP7)	M30
	1,4	C4.3.5	Report from additional workshop(s) on selected research activity	M27 +
	2,4,5	C7.3.3	Online presentation of results from first field work at European ATBI+M pilot site	M25
	2,6	C7.3.5	Outline for manual on ATBI+M field recording techniques	M31
	2,6	C7.3.8	Manual on ATBI+M M field recording techniques	M40
	1,3,4	C7.4.5	Report of first field session of ATBI+M teams at established non-European pilot site	M35
	1,3,4	C7.4.6	Report on inventory and monitoring activities at established European ATBI+M pilot sites	M36
D13: First report on Integrated Training for taxonomy (M41)	1,2,3,6	C8.3.1.2	Report on the first Summer School	M32
	1,2,3,6	C8.3.1.3	Outline and curriculum for second "summer school" training course(s) at European ATBI+M pilot sites	M35
	1,2,3,6	C8.3.2.1	Interim report on the pilot expert in training programme	M30
	1,2,3,6	C8.3.2.2	Progress report on the pilot expert in training programme	M34
	1,2,3,6	C8.4.1.1	Text of draft course prospectus, ready for its consideration by the BoD	M33
	1,2,3,6	C8.4.1.2	Draft agreement on course prospectus of the DEST	M41
	1,2,3,6	C8.2.2	Progress report on the draft course prospectus	M28
	1,2,3,6	C8.3.1.1	Outline and curriculum for first "summer school" training courses at European ATBI+M pilot sites	M24
	1,2,4,6	C5.71	Organization of a joint Geospatial training course with WP5.4, WP7 and WP8	M36
D14: 1st report on implementation of communication and PR strategy	5,6	C8.5.1	Overview of existing taxonomy-based education programmes in NHM and BG and recommendations for all partners	M26
	5,6	C8.5.2	Report on "How to communicate taxonomy?" with best practices and success stories useful for the PR strategy (link with WP1)	M26

Deliverable number	General Objective	Component number	Component title	Date due
(M35)	5,6	C8.5.3	Work programme for designing common public awareness activities at the 2010 horizon concerning all EDIT partners	M32
	5,6	C8.5.4	Report to the BoD on integrated approaches of PA activities towards 2010 and beyond	M33
	1,6	C1.3.2	Newsletter bimonthly issues	M24, 26, 28, 30, 32, 34, 36, 38, 40
	1,5,6	C1.3.1	Improved website	M26
	5,6	C8.5.5	Recommendations and guidelines for integrated approaches of PA activities towards 2010 and beyond	M35
	1,4,5	C7.1.5	Presentation of ATBI+M concept at international conference "Biodiversity Research – Safeguarding the Future"	M26
	1,4,5	C7.1.7	EDIT ATBI+M special flyer for outreach	M26
	5	C7.5.2	Documentation on first ATBI outreach and promotion event for media and the public at PN Mercantour & PN Alpi Marittime	M29
D15 Elements for research policy – new strategies for Taxonomy (M35)	1,3	C4.1.6	Report on research plans of EDIT partner institutions	M32
	1,3	C4.1.7	First report from Science Policy Group including draft research strategy proposal based on the vision statement provided by the Report from the Future Scoping Group to the BoD – 2008 (C 1.2.3) and the recommendations from the "Future trends of taxonomy" symposium (C.4.3.1)	M29
	1,3	C4.1.8	Second report from Science Policy Group including proposal for implementing the research strategy to EDIT considering C4.1.1 and C4.1.2	M35
	1,3	C4.3.2	Summary report with current research priorities of EDIT partner institutions	M30
D16: Mechanism to identify funding opportunities, streamline response to existing calls and influence future calls (M40)	2, 4, 5, 6	C3.2.3	Proposal for funding of Pan-European species directories infrastructures, extending the geographical scope	M40
	2, 5, 6	C3.2.5	Create funding opportunities to build and implement the EDIT phyloinformatics toolbox software based on the preliminary analysis of possible designs	M36
	4, 5	C3.4.3	Submit a funding proposal for a Fungal Barcoding Initiative (FBI), with Canadian scientists, identifying new suitable barcoding genes diagnostic at species level	M33

Deliverable number	General Objective	Component number	Component title	Date due
	2, 4, 5	C3.4.4	Proposal(s) for funding of European DNA-barcoding projects and facilities	M36
	4, 5	C3.4.5	Organise workshop(s) on joint barcoding proposals	M36
	2, 4, 5	C3.4.7	Submit a funding proposal for combining DNA-barcoding and ATBI+M in selected European areas	M32
	2, 3, 4	C7.5.4	Status report of additional funding opportunities for longer term operation of established and planned ATBI+M sites	M 33
D17 Second analysis of possible designs for European Distributed Institute of Taxonomy as a supranational entity (M42)	1, 3	C5.54	First MoU(s) ready to be proposed to directors	M35
	1, 3, 4	C5.62	Framework document circulated to BoD	M 25
	1, 3, 5	C3.1.3	Report on the requirements for the physical infrastructure, stemming from research and stakeholder needs	M36
	1, 3	C3.1.4	Identification of barriers in the operations of the (physical, equipment, digital and administrative) infrastructure component	M 40
	2, 4, 5, 6	C3.2.4	Linking Pan-European species directories infrastructure with structures outside Europe	M40
	4, 5	C3.4.6	Establish liaisons with industry; coordinate current and foreseen initiatives for barcoding proposals by groups focussing on user and stakeholder needs	M40
	1,3, 6	C3.5.3	Full proposal for a communication mechanism	M33
	1,3, 6	C3.5.4	MoUs for cooperation with other networks/infrastructures	M36
D19: Integrated administrative and managerial structure of EDIT (M59)	3,4	C7.2.8	Institutional agreement on participation of EDIT staff in ATBI+M activities following the EDIT template for institutional agreements	M42
	1,3	C4.3.6	Report on workshop scientific publication in EDIT institutions	M35
	1	C5.63	Memorandum of cooperation for EDIT institution libraries	M32
D20 Version 2 of the Internet Platform for Cybertaxonomy (M41+)	1, 2, 3, 4, 6	C5.58	CDM2 Framework Implementation available	M41
	1, 2, 3, 4, 6	C5.59	CDM2 Community store interfaces documented	M41
	1, 2, 3, 4, 6	C5.60	ATBI site data linked to geoplatform	M40
	1, 2, 4, 6	C5.69	E-conference on requirements of geospatial services for taxonomists	M36

Deliverable number	General Objective	Component number	Component title	Date due
	2,4,6	C5.70	Implementation of converter webservice that transforms point occurrence data to distribution data	M34
	2,3,4	C5.76	Taxonomic sample data available (data)	M36
	1,2,3,4	C5.77	CDM data interface components available (software)	M36
	2,3,4	C5.78	V2.0 of the CDM editor available (software)	M41
	1,2,3,4	C5.85	Integrate further platform components with the CSSO security infrastructure	M41
	2,3,4	C5.80	Review of CDM v.1 and model for descriptive data in CDM v.2 (Report/Model)	M35
	2,3,4	C5.81	Use case model and functional description of CDM descriptive data editor (Model/Report)	M38
	1, 2, 3, 4	C2.1.3	First version of specification of the online information service made available on web site	M 26
	1, 2, 3, 4	C2.1.4	Data on EDIT partner taxonomic experts entered in information service	M 31
	4,6	C7.3.6	Establishment of a web-based forum for standardizing particular field recording techniques in ATBI+M activities	M34
	4,6	C7.3.7	Report on usability of ATBI map visualization tools for ATBI+M scientists and stakeholders	M37
	3,4	C7.4.7	Content management system for ATBI+M administration and outreach implemented for every active ATBI+M pilot site	M37
	2,4,6	C5.72	Dynamically link GBIF data to core geoplatform allowing GBIF data to be visualised in addition to custom user data. This affects the GIS webapplication and also the map generation webservices by adapting the Generic Query tool developed in SYNTHESYS NA-D.	M40
	1,2,3,4	C5.30	Launch of ViTaL as a functioning component of the EDIT Platform for Cybertaxonomy including system and user documentation to enable effective access	M40
	2,3,4	C5.43	Test data report	M33
D21: Version 3 of the Internet Platform for Cybertaxonomy (M54)	1, 2, 3, 4, 6	C5.39	Application to map inventory completeness	M45
	1, 2, 3, 4, 6	C5.40	Application to select vectorial units by environmental and spatial criteria (ED application)	M45
	2,4,6	C5.73	Workshop with WP7 contributors to geo-Platform to review geo-platform functionality (report on requirements)	M41
	2,4	C5.88	Functional description for service to generate printed publication from the CDM	M41
	5,6	C4.2.7	Report on user needs and openings for (long)-lasting collaboration with users of taxonomic information	M47

Deliverable number	General Objective	Component number	Component title	Date due
		C6.12	Deliver a training package for Scratchpads	M31
D22 Report on progress towards stakeholder forum (M47)	1, 2, 3, 4	C2.1.5	Test data from test country/ies entered in information service	M 33
	2,5	C7.5.6	Survey from user feedback of ATBI+M results by conservation community and stakeholders	M42
D23 Operational Pilot Information Service on European Taxonomic Workforce (M36)	1, 2, 3, 4	C2.1.3	First version of specification of the online information service made available on web site	M 26
		C2.1.4	Data on EDIT partner taxonomic experts entered in information service	M31
		C2.1.5	Test data from test country/ies entered in information service	M33
	1, 2, 3, 4	C2.1.6	Data on experts associated with first batch of ATBI+M's entered in information service	M 33
	1, 2, 3, 4	C2.1.7	Data on experts associated with first batch of demonstrator group activities entered in information service	M 33
	1, 2,4, 6	C2.3.2	Second version of the online information service	M 29
	1,2,6	C.8.1.4	Proposal for an interactive on-line catalogue of training resources for taxonomy, updateable by all concerned parties	M35
		C7.2.7	Coordination plan for human resources management and administration of ATBI+M task forces	M36
	1,4	C4.3.3	Data base on approaches to taxonomy used by EDIT researchers (collaboration with WP2 task 2.1)	M26 +
D24 Roadmap (M35)		C2.0.1	Areas of responsibility outlined and made available on EDIT web site	M26
		C2.4.2	Description of criteria for and mechanism of support	M24
		C2.4.3	Implementation of mechanism of support for staff exchange	M25
	1, 2, 3, 4	C7.2.4	Establishment of a first extra-European ATBI+M site	M 26
	2,4	C7.2.3	Signed agreement for establishment of a second European ATBI+M pilot site	M25
	2,4	C7.2.4	Signed agreement for establishment of a first non European ATBI+M pilot site	M27
	4,5	C7.2.6	Material transfer Agreements (MTA) concluded for specimens and materials collected at first non-European ATBI+M pilot site	M30
	1,3	C7.4.8	First review of methods and techniques applied at European ATBI+M pilot sites	M42
	1,3	C7.5.3	Criteria for the review of ATBI+M organization and procedures	M30

Deliverable number	General Objective	Component number	Component title	Date due
	2,4	C7.5.5	Survey from feedback of ATBI+M participants	M38