Project no. 018340

Project acronym: EDIT

Project title: Toward the European Distributed Institute of Taxonomy

Instrument: Network of Excellence

Thematic Priority: Sub-Priority 1.1.6.3: "Global Change and Ecosystems"

C5.4 (formerly D5.1.3.1): Documentation of internal rules for hardware and software and IST resources of remaining EDIT partner institutions

Due date of component: Month 16
Actual submission date: Month 19

Start date of project: 01/03/2006 Duration: 5 years

Organisation name of lead contractor for this deliverable: RMCA

Project co-funded by the European Commission within the Sixth Framework Programme (2002-2006)		
Dissemination Level ("X" in the relevant box)		
PU	Public	X
PP	Restricted to other programme participants (including the Commission Services)	
RE	Restricted to a group specified by the consortium (including the Commission Services)	
CO	Confidential, only for members of the consortium (including the Commission Services)	

1. Background

Within EDIT WP5 the general objectives are:

- The creation of the Internet Platform for Cybertaxonomy, oriented towards its practical use for revisionary taxonomy, taxonomic biodiversity inventories and monitoring of taxa
- Integration of the participating institutions' biodiversity informatics and IT resources.

The Cybertaxonomy platform is meant to be a durable offer of services fully integrated in the infrastructure of the institutions. The long term maintenance of project based developed IT services has been identified as a critical issue in previous projects. To achieve this goal the IST departments of the institutions have to be informed about and involved in EDIT from the start.

The documentation of the internal decision making structures of the participating Information Science and Technology (IST) departments, the documentation of internal provisions, rules and traditions for the acquisition and use of equipment and software; and the documentation of relevant hardware and software resources is thus essential:

- to set up a network of contact persons from the IST departments of the EDIT partners institutions and beyond
- To gain a better knowledge of the functioning of the IT infrastructures and decision making processes
- To identify the strengths and needs in term of IT services
- To identify the requirements and IT policy rules
- To identify at early stage potential technical or legal barriers.

The documentation will be an useful reference document to guaranty that the Cybertaxonomy platform services can indeed be implemented and used by the institutions in conformity with the locally to be followed IT policies and in agreement with the local authorities.

This activity is in strong synergy with activity 5.1.3 : INFORMATION SCIENCE & TECHNOLOGY COMMISSION (ISTC), http://wp5.e-taxonomy.eu/blog/wp-content/uploads/2007/04/istc_1_report1.pdf. Indeed the members of the ISTC at the interviewed institutions are either the same or those who could indicate further contact persons locally. Institutions not yet officially represented in the ISTC committee and contacted during this present 5.1.2. activity, are strongly encouraged to appoint a representative in the ISTC committee.

2. Methodology

The activity had already started and was taken over. A form was thus already available in order to collect the needed details from the institutions (Annex). A few institutions had already filled in this form. It was thus decided to keep it unchanged for the continuation of the activity to guaranty the coherence in the interpretation of the collected information.

Identified additionally needed details have been asked during the face to face interviews or electronically.

Procedure followed

1. Potential contact person are identified and contacted via e-mail, phone or occasional face to face encounter in the context of EDIT or other related project.

2. The contact person depending on his prior level of knowledge of EDIT and WP5 is informed briefly about EDIT in general and the purpose of WP5 and more specifically the activity 5.1.2. and receives a blank Institution form to illustrate the type of information needed

3. The contact person assesses if he/she is the proper contact person to provide the needed information, can ask for clarification about the information asked on the form.

4. The contact person names another or additional contact persons able to provide the information needed.

5. A visit is scheduled for interviews with the identified contact person (s).

6. It is recommended to the contact person to return the filled in form with the technical information before the scheduled face to face meeting. This enables to get directly to the point during the interviews, to already discuss potentially identified issues or elements that need further explanations.

7. During the interview the contact person is asked to explain what he/or she knows about EDIT in general.

8. The way the general presentation (annex) on EDIT and WP5 is presented is adapted from the answers received in point 7 and will determine the time passed on each slide.

> **Slide n° 7** is very important and a good deal of time is passed to explain the different WP and how they are related. It enables to show how WP5 integrates with the other activities in EDIT and what the end-uses are supposed to be
> **Slides 9-10**: The contact person can here indicate with which institution they may already collaborate. This is also often the opportunity for the interviewed person to ask to which tasks in EDIT the listed institution participate and who they should contact. It help thus foster the collaboration and integration.
> After **Slide 11:** The interviewed person is asked if he/she has general questions on EDIT.
> **Slide 12 to 25:** Presentation of WP5 with a special focus on the ISTC committee:
>
> > **Slide 16:** asked if sees other type of services or software and name examples, ask if they have or use this kind of services and software already and comment them.
> > **Slide 18:** Presentation of the ISTC committee and its role. Handing out a printed version of the ISTC document and discussing it.
> > **Slide 20:** Now restating based on what has been learned about EDIT how task 5.1.2 fits in the whole process.
> > **Slide 21-22:** clarify the role of the ISTC committee of EDIT and assess how it is viewed in the institution
> > **Slide 23:** Go through the different categories of tools, asking if see other needed categories and name known or already used tools.
> > **Slide 24:** ask about the certification process of EDIT and whether the institution would find it positive or not, would acknowledge such a certification.
> > **Slide 25:** Ending by showing the websites (now blog and wiki)

9. Then go through the pre-filled form to clarify some points or ask additional question, like the permission or not to use communication tools like Skype within the institution or any other point raised during the presentation.
10. If time, relevant and internet connection available quite some time is spent to show and test existing solution from the categories from slide 23.
11. If the institution is not already represented, it is strongly recommended to appoint an adequate staff member to contribute to the ISTC committee.

3. Results

Disclaimer: As it can be seen in the status table (annex), in almost all EDIT partner institutions and those beyond EDIT contact person(s) have been identified. Most have returned the form, several have been interviews, while for others additional information have been collected electronically. The underlying numbers can thus be seen as indicative only, but are considered to reflect the situation quite well. As agreed with the partners, the forms and more detailed information are kept confidential.

Categories of ICT departments (indicative numbers):

- No ICT unit (11%)
- Managed centrally by one person (23%)
- Managed in a decentralized way by several person (
- Several ICT units responsible for different services in house (4%)
- One ICT unit in house (27%)
- ICT unit in house, but some services managed by third parties (24%)
- ICT services completely managed by third parties (11%)

These figures are based on the interviews and the collected information. The IT services based by third parties, for example are often for database housing or services that need more resources or bandwidth for specific projects by the staff working on those projects and this is not always known or followed by the ICT departments. These activities can be very relevant to EDIT, but are often not considered as services that the institutions or ICT services can provide because too specific or too expensive to implement, when the facility exists in a nearby university for example and that the University is also partner of the project.

Prior Knowledge of EDIT

- Only heard of it by the acronym, but no more information
- Partial knowledge of some EDIT activities
- Rather good knowledge of EDIT
- Very familiar with EDIT

Whatever category the institution was belonging to the short presentation has proven useful to have a visual support and structure the different steps of the interviews.

General observations

- All interviewed or contacted ISTC staff were very pleased to be contacted at the start of a new project, to be asked their opinion, to have the opportunity to become member of the ISCT committee and to provide feed-back and recommendations.
- Almost all contacts declared to be open to the implementation of EDIT products in their institution. Barriers identified so far are more technical, linked to a lack of additional staff or other resources to manage and maintain the services.
- The acceptance of installing tools to be used in the framework of EDIT was generally high. Certification procedures and claims to follow internationally recommended standards played a major role here.
- Security rules and other IT policies are most of the time necessary to keep the IT management of the institution stable and functional with often a cruel lack of resources, which makes it sometimes difficult to satisfy the needs in terms of services of each staff member individually. A platform as planned by EDIT to be used by a substantial number of staff members in house and in collaboration with other partner institutions is thus far better accepted.
- Most interviewed persons await advantages in collaborating with ICT departments of partner institutions in terms of knowledge and resource sharing.

Identified barriers

- Several Institutions have a rather low bandwidth, which may result in the problem that some collaborative tools envisaged will be too slow or timing out, especially if transfer of large size images or maps are considered.

- Firewall settings may have to be adapted accordingly. Most institutions declared to have no major problems if it concerns tools widely used by the staff members.

- Not all staff member have administrative rights on their machines, so tools requiring installing of software or plus-ins locally may lead to not wanted extra work from ICT staff as they prefer not to give administrative rights or permissions to install software to all the staff members.

- The most common reaction was 'Who will guaranty the maintenance and updating of the tools of the Cybertaxonomy platform after EDIT". There were many questions on the practical feasibility of the planned EDIT Certification procedures.

Collaborative communication tools

- For daily communication and collaboration Skype is widely used in the visited information, used both in chat and telephone mode. In some institution the usage of Skype is not forbidden, but it is not used because staff does not see the need of it. Only one of the interviewed institutions is forbidding the usage of Skype or MSN to its staff, one because it is a rule of the country that public bodies are not supposed to use them and for the other it is a local internal rule.

- Blogs, Wiki's, CMS, Forum, mailing list, RSS feeds are generally not seen as a technical or IT policy issue. Many expressed concern that there are too many services like this already and fear a lack of time to contribute substantially or post messages via these types of services. But no one came up with alternative solutions to these communication services.

- Real big scale video-conference facilities are seen as interesting by many interviewed persons, but may exclude partners having not the infrastructure for this type of communication facilities. Simpler solutions like those cited in the two points above are preferred as well as regular face to face meetings or thematic workshops.

4. Conclusions and Further Recommendations

Most of the institutions are very interested by the services planned by EDIT and willing to participate to the ISTC committee. By proper communication and requesting of feed-back in time, the technical and IT policies issues seem in most cases so far possible to overcome. The certification process, the usage of standard tools and protocols and the willingness to have a long stable and professional IT infrastructure offering services to taxonomists are welcome. With the proper resources, knowledge and resources sharing most of the institutions are ready to make test implementations of components of the planned cyber taxonomy platform.

However as can be deduced from the current status table, some partners may need to provide additional information. The organization of the face to face interviews took a lot of time, as often several persons have to be interviewed for the different information components needed. Due to many meetings and to other projects these institutions are involved in, it often take quite some time and last minute postponing to find a 2 to 4 days time span for proper interviewing, which slows down the whole process a lot.

The present results have also to be seen as a snapshot of the current situation. Several of the institutions involved are in the process of major renovations of their exhibition rooms, collection storage facilities and buildings. The ongoing or planned renovations often also include an enhancement or renovation of the IT infracstructure.

- Our recommendations are thus to gather regular updates, preferably via electronically forms for all partners and have their content verified by the contact person before their usage for the analysis of the results and the reporting.

- Analyze the approved forms to deliver the documentation of the IT infrastructure and the decision making.

- Target in priority the partners who have not yet a representative the EDIT ISTC committee and urge them to appoint a staff member for this purpose.

- During the interviews, the contact persons were very keen on seeing implementations or demos of foreseen tools.

- More concrete requirements of the to be used services are also needed by the ICT contact person whether to assess if the implementation would really cause them a problem at institutional level or not.

- During the stay at the institutions, it was also most of the time asked to make a general presentation of EDIT as a whole and its goals to the concerned staff members.

According to the circulating reports on the WP5 blog and wiki, several components to be included in the Cybertaxonomy platform have been identified, especially in the field of descriptive, modeling and geospatial components.

As a follow up of this analysis, we would thus recommend to:

- select in agreement with the ISTC committee the tools ready for demo or test implementations

- to devote visits to the institutions to life demonstration of online collaborative tools and services for taxonomists

- whenever relevant to have skilled EDIT representatives collaborate locally with the ICT departments and staff for test implementations of components of the Cyber taxonomy platform.

Annex

Institute Specification form

General presentation of EDIT and WP5 presentation used during the interviews

Status table

Technical infrastructure (existing infrastructure)

Hardware

- Internet connectivity, bandwidth, stability of Internet connectivity

- Intranet connectivity (bandwith of backbone, etc.)

- Available servers within the institution. Are external servers used (e.g. servers located at a central university IT department).

Software

- Workstation Operating system in use.

- Server Operating systems in use.

- Database management systems in use

- Communication system in use (Email, Wiki, Workgroup systems)

- Programming languages, versioning systems, etc.

- Specific important Database/client software systems (e.g. software for management of collections, taxonomic databases or other important scientific software products).

Organization of IT tasks:

I&IT Unit(s)

Has the institution an organizational unit specifically dedicated to informatics tasks? Describe (structure, personnel, tasks)

Is there a regularly updated documentation for system planning?

Who is responsible for decisions on

Desktop level

- Acquisition of desktop components for staff members (hard- and software)

- Acquisition of desktop components for project personnel (hard- and software)

Internal network level

- Networking components: internet connectivity (important because in future huge amounts of data might be transferred, e.g. image data).

- Server operating systems and database management systems (important for data sharing, harmonization of data structures).

- Data security measures (Backup strategies)

- System security measures (e.g. fixed IPs, MAC No registration, etc.; virus control)

External connections

- Firewall policy

- Junk email policy

- Virus control

- Installation of components needed for networking projects (e.g. web services).

- WWW services (website)

Programming and informatics services

- In house software development, data import/export.

Policy issues

- Web-publication policy (content, copyright, citation)

- Participation in biodiversity informatics projects ; priorities

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Biodiversity informatics activities

Major In house activities (→ target User group is the institution)

Describe major in house software development and databasing activities and specialties..
E.g.: specific databases, collection digitisation

Major external projects (→ target User group outside the institution)

Describe major "external" activities carried. (E.g. networking projects with other institutions)

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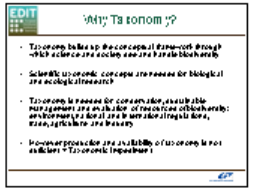

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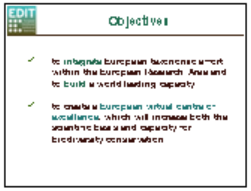

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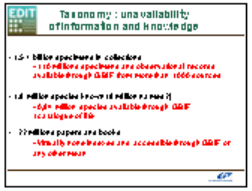

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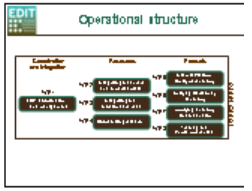

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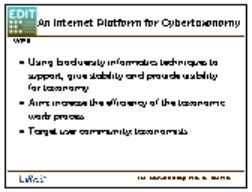

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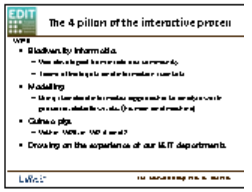

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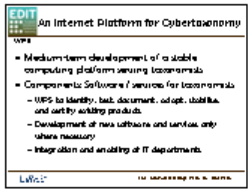

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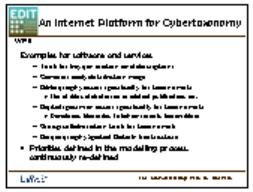

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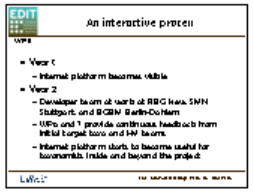

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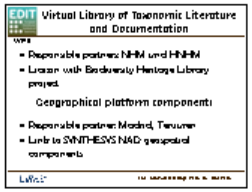

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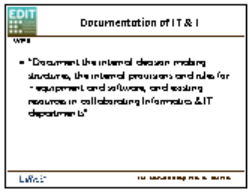

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Status table

Insitutions	Contact person	Form returned	Interviewed
CDC	yes	not relevant	not relevant
MNHN	Yes	yes	yes
UKBH	Yes	no	no
CSIC - MNCN	Yes	no	no
UvA	yes	yes	no
NHN	Yes	yes	yes
NNM	Yes	Yes	no
CBS	Yes	yes	no
FUB -BGBM	Yes	yes	yes
NHML	Yes	no	no
RBGK	Yes	Yes	no
SMNS	Yes	no	partially
RBINS	Yes	yes	yes
RMCA	Yes	yes	yes
NBGB	Yes	yes	yes
MIZPAN	Yes	yes	yes
IBPAN	Yes	no	no
HNHM	Yes	no	no
CUB	Yes	no	partially
IBSAS	Yes	yes	partially
INRA	Yes	yes	yes
SMEBD	yes	not relevant	not relevant
SP2000	yes	not relevant	not relevant
BINRAS	Yes	Yes	Yes
ZINRAS	Yes	no	Yes
MO	Yes	yes	no
USNM	Yes	no	no
Non EDIT partners			
RBGE	yes	no	no
NRM	yes	no	no
INPOL (University Of Warshaw, GBIF node)	yes	no	yes

Partially means, that either the contact person was interviewed during a meeting and not at his home institution or electronically, so the installation have not been seen. It may also refer that not all relevant staff members could be present during the visit and some parts of the questionnaire could not be discussed upon.