



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"

## **C5.69 e-conference on requirements of geospatial services for taxonomists**

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Organisation name of lead contractor for this component: MIZPAN

Revision final

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

This report has been compiled by Dominik Mikiewicz (MIZPAN) and is based on the e-meeting that took place on the 1<sup>st</sup> of April 2009. The following persons participated in the meeting: Andreas Müller, Patricia Mergen, Pere Roca Ristol, Bart Meganck, Andreas Kohlbecker, Jorge M. Lobo and Dominik Mikiewicz

### **Target of the e-meeting:**

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The e-conference was held in order to get a better view on the current status of the EDIT WP5.4 Geospatial Services, and to define the priorities for further implementation, in order to make them as useful as possible for the taxonomists as end users.

### **Agenda of the e-meeting:**

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- overview of the current state of development in the geotools
- overview of the priorities for further implementation define the taxonomist's priorities for the tool, see what everyone can contribute to the work, and where communication/cooperation can be improved

### **INSPIRE**

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- make the geotools inspire compliant – that basically means they should follow INSPIRE standards on interoperability and exchangeability of the data; the OGC (OpenGISConsortium) compliancy of the EDIT GeoTools is already a major step towards INSPIRE, as the same or very similar protocols are used.
- Patricia Mergen is to prepare a checklist of what needs to be done in order to make EDIT GeoTools Inspire Compliant

### **EDIT mapViewer**

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- mapViewer changed to OpenLayers as the previously used Mapserver is no longer developed and maintained
  - It is possible to make use of the REST services in OpenLayers
  - as a priority people have to test and give bug reports and feedback ( brief training course in the different institutions involved in EDIT ?) - when testing we will find out which functions are most useful for taxonomists
  - for testing and to gain more feed-back, a "prototype" of the mapViewer can be distributed amongst the EDIT teamleaders and others that potentially may have an interest in using it; this will happen when the viewer is stable and operational
  - before a stable version is available, mock-up videos may be distributed
  - for e-Biosphere conference there should be a functional mapViewer version available
  - no further resources will be spent on extending the spatial analysis, since this is not a core part of the EDIT Platform for Cybertaxonomy, rather connect and make existing tools and libraries interoperable instead of reinventing these from scratch . Most of the work in spatial analysis has already been done; so this function can be added as an extra module later on.
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## GeoServices

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- features regarding the GEO Web services
  1. stability issues
  2. combined web service for point and distribution
  3. additional layers like topography
  4. additional features zoom / pan
- There are potential users not using the GeoServices because the functionality is still too basic. Further implementations are surely needed. Improvement of REST is really important
- The switch to OpenLayers (and a more modular layout) will directly link REST webservices and mapViewer, so their implementation will proceed much more synchronised

## General outcome

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- we have 1 GIS specialized programmer (Pere) working on both REST and mapViewer, and both are required for the EDIT geoplatform: there is a need for rationalisation, so objectives can be reached
- The switch to a more modular setup (with OpenLayers for the visualisation) will alleviate the work (merging REST a visualisation implementation) and allow more direct feedback on the services. Also, time that until now was devoted to the visualisation would be freed up and can be used for the background (REST) services and documentation. This architecture could make use of MapFish
- maybe we can have the GIS group of LifeWatch contribute
- there are always technical issues that would better be solved by a main developer (Pere Roca Ristol - CSIC) as he knows 'his' code
- for other more general issues others could provide help; for example:
  - a list of useful remote WMS servers
  - a list of useful vectorial layers for taxonomists
  - prepare GIS layers to be uploaded on Geoserver
  - documentation and specification of the REST services can still be improved
  - further MapViewer documentation
- Pere is to set up a list of things that could be done by non-developers
- A ticket system for the tasks is to be introduced
- maybe the best option is to produce a 'light', stable version of EDIT mapViewer so users can start testing it

- WP7 wants to have a system where they can easily upload the collected info, visualize the map and arrange it to their taste (printing, camera ready part), add if needed additional background layers : this could be realised in the OpenLayers-based setup
- A list of all the needed functionality / open issues for both applications and for other open issues will be put together in the development Wiki as roadmap page

## Conclusions

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- The switch to OpenLayers for visualisation, and a more modular layout, will allow the direct use of the REST webservices in the mapViewer, so implementation will be simpler, quicker and more synchronised
- The end user (taxonomists) will notice a more streamlined development of the mapViewer and the REST-webservices, with a more reliable setup (even in the demo version), as new functions will be added as modules rather than as changes to the existing code
- The modular setup makes it much easier to quickly adapt the tool's functions to the taxonomist's needs (adding certain functions as modules) : there is no more need for heavy redevelopment to add in extra features