



Ljubljansko barje, Slovenia. Photo: Maša Šorn

VISUALISATION AND PUBLIC PARTICIPATION

NEW DIGITAL TOOLS FOR SUPPORTING PARTICIPATION PROCESSES

Landscape development is a very complex issue that, according to the VITAL LANDSCAPES philosophy, is not solely dependent on the expertise of planners, architects and other professionals. Farmers, regional stakeholders and “ordinary people” may likewise be considered as experts since they live and work in the landscape. Correspondingly, the key message of the project is: **Vitalize your landscape! We are all part of our landscape and its development. The face of our future landscapes depends on us!**

But how can we involve people with diverse levels of knowledge and different views on landscape in planning and development processes? And, how can we engender a sufficient quality of participation and a fruitful culture of public debate? Here, new digital tools for visualising landscape changes in combination with public participation processes can assist in finding suitable and widely accepted solutions for sustainable landscape development.

Accordingly, the development and exemplary realisation of new digital tools for visualising landscape changes is one of the key aspects of the VITAL LANDSCAPES project. This newsletter details project activities related to this topic and present additional approaches to landscape visualisation.

Also included in this newsletter is an update on the latest project outcomes and upcoming activities. On page 4, we present a more detailed profile of PP2, Saxony-Anhalt Heritage Association. For further information, please also see our website www.vital-landscapes.eu or contact us directly.

As the year draws to a close, we wish all our readers a peaceful Christmas time! We would like to thank all who have helped support the first steps of the VITAL LANDSCAPES project – we look forward to continuing our cooperation in 2011 and beyond!

Jörn Freyer & Burkhardt Kolbmüller (coordinators)

MODERN TECHNIQUES FOR VISUALISING LANDSCAPE CHANGES

INTERNATIONAL WORKSHOP, KRAKÓW / PL, 27-28 SEPTEMBER 2010

Landscape development is a complex process involving a lot of actors, often with quite different and contradictory (economic, financial, ...) interests. Even when development scenarios are a matter of public debate (which is not often the case), many participants lack sufficient information and skills to be able to imagine the results of different scenarios. Moreover, the complexity and impenetrability of planning documents hinders and demotivates laypeople in making use of available participation opportunities.

The assumption of VITAL LANDSCAPES is that modern visualisation tools can encourage, support and facilitate public participation in landscape planning. At present, however, there are a bewildering number of different approaches and solutions on the market, for example 2D or 3D visualisation, static or dynamic systems, with or without interactivity and so on. Furthermore, the cost, technological requirements and preparatory work involved (e.g. to gather necessary data) vary considerably.

The workshop at Kraków Agriculture University (27-28 September 2010) presented and discussed existing solutions with a view to identifying suitable software that supports the aims of the project. The workshop aimed to find answers to the following questions:

– Which products are available on the market,

and what are their strengths and weaknesses?

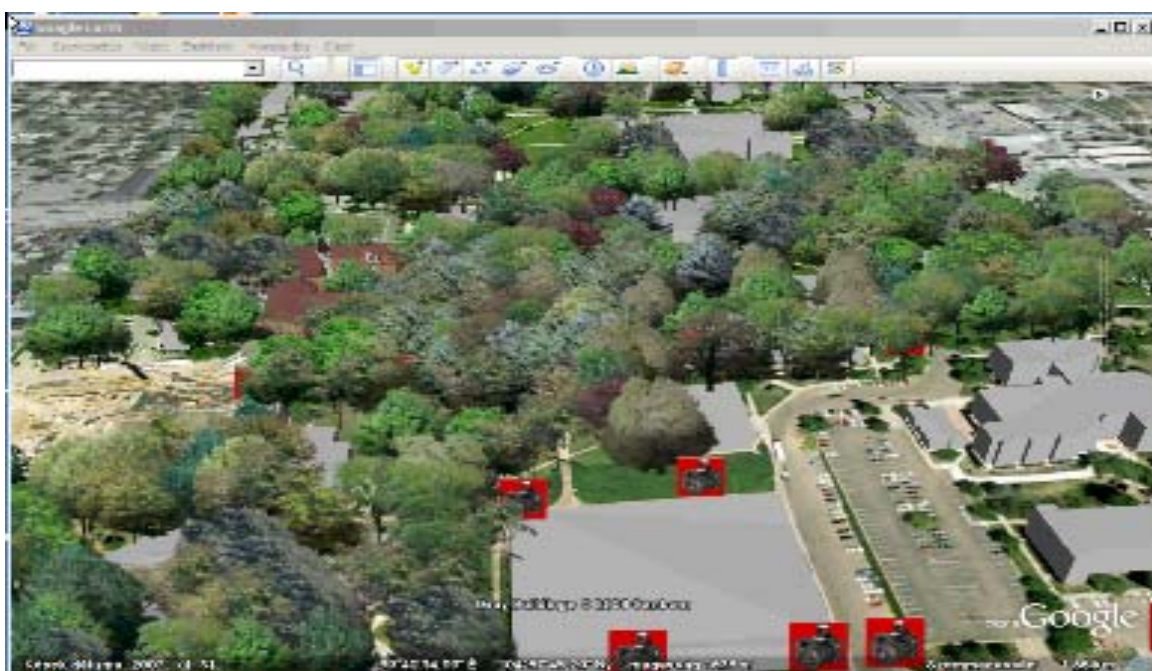
– Which solutions are appropriate to public participation processes at a smaller scale (e.g. villages) taking into account the limited budget and manpower available (e.g. to gather data)?

– Which visualisation tools best help laypeople (e.g. regional stakeholders and the public) to imagine the consequences of different alternatives?

Based on this, experts from PP6 and PP7 identified the following specific requirements of visualisation tools in public participation processes:

- web-based (should not require special software, only an internet connection)
- free viewer for user (no cost to the user)
- easy handling (no special knowledge needed)
- rapid, photorealistic rendering, detailed objects
- interactivity
- large area handling (landscapes)
- terrain modelling (real 3D visualisation)
- objects on landscape (able to handle 3D object)
- scenario handling (before/after) to visualise landscape changes
- ability to use regular GIS and CAD data (no special format or conversion work necessary)

After comparing the features, prices and complexity of different software solutions (see table), GoogleEarth was identified as the most suitable tool for the purposes of VITAL LANDSCAPES. In a next step, pilot projects will test this tool in detail.



Requirements	VNS	LandSi m3D	Terra- gen	Gene- sisIV	ArcGIS	Bing	Lande Xplore	Google Earth
Web-based	O	O	O	O	X	X	X	X
Free viewer for user	X	O/X	O	X	X	X	X	X
Easy handling	O	O						X
Sophisticated rendering option	X	X	O	O	X	O/X	X	X/O
Quick rendering	O/X	X	O	O	O	X	O	X
Detailed objects	X	X	X	X	X	X/O	X	X/O
Interactivity	X/O	X/O	O	O	X	X	O/X	X
Large area handling	O	X	O	O	X	X	O	X
Terrain modelling	X	X	X	X	X/O	X	X	X
2D/3D	X	X	X	X	X/O	X	X	X
Supports objects on landscape	X	X	X	X	X/O	X	X	X
Before/after scenario handling	X	X	O	O	X	O	X/O	X/O
Can use regular GIS, CAD data	X	X	X/O	X/O	X	X	X/O	X

Features of different software solutions of participative landscape planning

MODERN VISUALISATION TECHNIQUES

APPROACHES AND PROJECTS

To avoid time spent re-inventing the wheel, VITAL LANDSCAPES contacted other projects that explore landscape visualisation in public participation processes. Of these, some of the most interesting approaches include:

VISULANDS

At the ETH Swiss Federal Institute of Technology in Zurich (CH), the VISULANDS project analysed public preferences and land manager's land use aims to develop visualisation tools that facilitate public participation in landscape management.

http://lrg.ethz.ch/visulands/fs_visulands.html

VIRTUAL LANDSCAPE THEATRE

The Virtual Landscape Theatre, developed by the Macaulay Land Use Research Institute in Aberdeen (UK), is a mobile projection facility that employs computer models to create an 'immersive' experience of local environments to help people explore their past, present and future landscapes.

www.macaulay.ac.uk/landscapes/

MODELLING TERRESTRIAL SYSTEMS

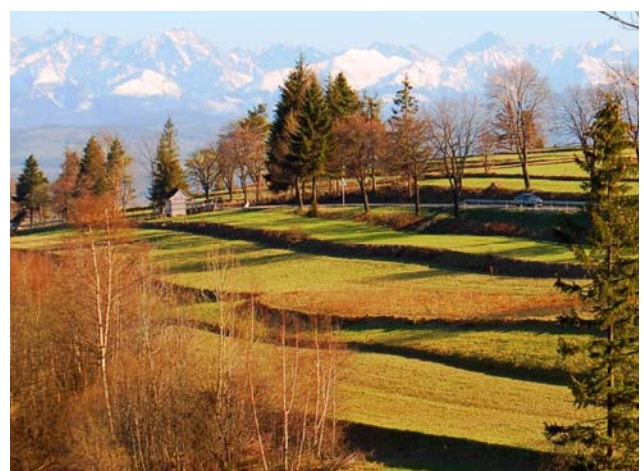
The Helmholtz Research Centre Leipzig (DE) develops modelling tools that focus on the visualisation of complex environmental data and processes, and database management.

www.ufz.de/index.php?en=17870

PLUREL

The PLUREL project, funded by the 6th Framework Programme and led by the University of Copenhagen (DK), develops new planning and forecasting tools essential for developing sustainable rural-urban land use relationships.

www.plurel.org



Raba Wyżna community, Poland. Photo: Jacek Pijanowski

PROJECT NEWS

WEBSITE UPDATED

The project website has recently been updated, including additional information on landscape protection and visualisation: www.vital-landscapes.eu.

FLYER AND BROCHURE

In accordance with the work plan, VITAL LANDSCAPES has published a project flyer and information brochure, both of which are available online and as a printed version.

MEETING IN BRATISLAVA

The next meeting of the VITAL LANDSCAPE project partners will take place on 17-18 March 2011 in Bratislava (SK), hosted by the Institute of Geography of the Slovak Academy of Science. In addition to the presentation of the PP4 pilot projects, a WP3 work group workshop will be held to discuss the evaluation of previous projects.

EXCURSION TO SLOVENIA

From 5-6 May 2011, a trans-national excursion will visit the PP8 pilot projects at Ljubljansko barje.



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PP2: SAXONY-ANHALT HERITAGE ASSOCIATION

WORKING WITH PEOPLE FOR PEOPLE



Church ruin near Nietleben, Germany. Photo: Annette Schneider

The Saxony-Anhalt Heritage Association is the main NGO in the field of heritage conservation, landscape documentation, folklore research and regional history in the Federal State of Saxony-Anhalt in central Germany. Founded in 1990, the association is actively supported by the regional Ministry of Culture and represents numerous local and regional heritage associations and projects. Its primary areas of work include:

- Monument conservation
- Regional and local history
- Traditional and current culture
- Arts and music
- Conservation of cultural and natural landscapes
- Regional languages and dialects

The Saxony-Anhalt Heritage Association organises conferences and workshops, educational activities, exhibitions and cultural events. A key activity includes work with children and civil society. The association is a partner in regional, national and trans-national projects.

In the framework of the VITAL LANDSCAPES project, Saxony-Anhalt Heritage Association will undertake the following tasks:

- Development and adaptation of a geo-referenced, web-based database of cultural landscape elements.
- The exemplary visualisation of landscape changes and landscape development by digitising historical maps from different centuries.
- Preparation and organisation of trans-national study tours for regional stakeholders to familiarise them with best practice landscape development strategies in the participating regions.
- The training of cultural landscape guides according to European standards and the development of curricula suitable for all CE countries.

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