

Virtual Limes Worlds

Background

The Upper German Raetian Limes has been on UNESCO's World Heritage List since 2005. The former frontier, which dates from the 2nd/3rd centuries AD and extends for 550 km, is Germany's largest archeological monument and has become an international tourist destination thanks to its official recognition.

In the LEADER Limes region, the historical border wall runs for 60 km through a hilly and impassable landscape and links the 11 neighbouring municipalities of Widdern, Jagsthausen, Forchtenberg, Zweiflingen, Öhringen, Pfedelbach, Mainhardt, Großerlach, Murrhardt, Welzheim and Alfdorf. However, only short sections of the archeological site remain visible along its entire length and the LEADER "Limes region" action group has been set up to make its cultural heritage more accessible and more understandable, and to ensure that it is showcased to its best advantage.

The challenge is how to preserve the hidden monument for future generations whilst at the same time providing visitors and residents with an historically correct picture of how the Limes originally appeared and functioned.

Objective

A complete reconstruction of the Limes *in situ* is not possible, but funds from the LEADER programme are being used to breathe new life into its cultural heritage and to make it more accessible.

The project aims to set a new trend in close-to-nature tourism using interactive knowledge tools in 3D technology in order to attract visitors and tourists to the Limes region and thereby to generate added-value in a structurally weak area.

Main Activities

The creation of an interactive 3D world in which visitors can find out about the Limes in their original environment is being developed based upon land surveys made by helicopter using precision laser technology (processing up to 160,000 measurements per second). The high level of penetration of the laser scanning technology allows the former characteristic features of the Limes to be revealed despite the wooded landscape. This includes the position of watchtowers and forts, burial mounds as well as the reconstruction of vegetation and road systems.

Some key 'milestones' of the project include:

- Definition of educational project objectives;
- Determination of existing 3D data terrain models, archeological reconstructions and identification of possible new 3D models;



At a glance:

Theme:

Rural Quality of Life and Economic Diversification

Sub-themes:

Improving the quality of life in rural areas

Keywords:

Historical site
Cultural heritage
Rural tourism
Information technology
Education

Country/Region:

Germany/Baden
Wurtemberg

Beneficiary Type:

Public/Local authorities

Project Cost:

€100,000 - €500,000

RDP Measure:

323 – Conservation and upgrading of the rural heritage

Duration:

Start date: May 2008
End date: December 2010

Last updated:

8 December 2010

- Tendering of technical services;
- Development work, including support from technical service providers and science partners (District Office for Monument Preservation, Archeological State Museum, Limes information centre);

Results and Benefits

The project work aims to create interactive products that assist with the visualisation and thus the interactive experience of the Limes world for a visitor.

The work is divided into three main results:

1. An interactive 3D presentation with real-time environment for museums, information centres and partner municipalities. This includes interactive exploration of the environment (Limes wall, towers, forts, crossings, people, etc.) by the visitor as in a 3D game involving different situations (day/night/weather conditions, animated characters) and with the option to vary environmental elements (vegetation, current development, etc). The presentation mode is flexible (screen, 3D TV, project systems);
2. An interactive website 'Virtual Limes World' offering navigation through the Limes world including a download area (films, etc.), project information (content, aims, area of application), information on project partners, information on project funding and external sources;
3. A multi-media DVD with information on the location of the Limes, examples of architecture (walls, towers, buildings, infrastructure), animated sequences (alarm situation, development of the Limes over time), and interactive games (build a fort, alarm situation etc.).



Lessons Learnt

"Although the municipalities neighbouring the Limes welcomed the promotion of our joint cultural heritage initially, the scepticism regarding the viability of financing was initially high", explains District Administrator Johannes Fuchs, Chairman of LEADER Limes Region. "The willingness for investment from our 11 municipal partners was ultimately supported by the EU and the State of Baden-Württemberg in the amount of € 126,000 and the Rems Murr district, which were prepared to coordinate the manpower required."

"Interactive knowledge transfer using the latest 3D technology also reflects the spirit of the times", comments Johannes Fuchs. "The 'Virtual Limes World' project offers an opportunity to open up a new, forward-looking dimension into realistic representations, which was met with great interest during the development phase."

Project Cost

EUR 200,000

Contact Information

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German NRN website: <http://www.netzwerk-laendlicher-raum.de>

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