

# INTERGEO 2006 Conference and Report about Recent Trends in the GIS sector INTERGEO

INTERGEO is Europe's biggest conference and trade fair for geodesy, geoinformation and land management. With more than 17,000 visitors and delegates from more than 80 countries the INTERGEO and the FIG World Conference 2006 – both took place together this year - is the largest meeting point for the industry sectors geodesy, geoinformation and land management in Europe and beyond. This year's INTERGEO took place in the international trade-fair center in Munich from October 10th to 12th 2006.

By Florian Fischer



*INTERGEO, prime marketplace for the very latest happenings and developments in the field of GIS.*

## Knowledge and Action for Planet Earth

The INTERGEO facilitates the contact between suppliers and clients. It represents a unique combination of international and interdisciplinary structure. As Jack Dangermond, ESRI's president, who visited the INTERGEO for the first time this year comments: "The fair is an important platform. I can only call on organisations worldwide to participate in INTERGEO, since this exhibition is the prime marketplace for the very latest happenings and developments in the field of GIS".

The congress trade fair is themed 'Knowledge and action for planet Earth'. Information and particularly geoinformation provides a source for knowledge that can be extracted by gathering, processing and visualising geodata to

assist in decision making and acting for the society and for planet Earth. The tools that mediate between information, knowledge and action are Geographical Information Systems (GIS). This report will point out recent trends in the GIS sector observed on the INTERGEO 2006.

While strolling around in the three big exhibition halls one can try his luck at Bentley's wheel of fortune, take over the steering-wheel in Trimble's Formula one racing car simulation, see the picture on page 7, inspect the micro-light at the booth of the University of Munich or relax in one of the canvas chairs at the artificial beach of the Open-Source Park. Whilst many INTERGEO visitors were attracted by these superficial eye-catchers to make them

having a closer look at the companies' products, many other developments and trends could be observed during a walk over the exhibition compound.

## The Rise of Earth Explorers

The boost of Earth Explorers like Google Earth attract the attention of millions of users worldwide. Although Google and Microsoft are no insiders in the GIS world, their developments seem to push the whole GIS industry and put GIS on the stage for a worldwide audience. I expected to see this influence on the INTERGEO. In fact some companies such as Bentley and research institutions like the Runder Tisch GIS e.V. presented technical solutions to dynamically link web map services with the Google Earth client software to visualise and query geodatasets via the Internet. Google Earth provides a convenient client which is available for free and is used by millions of people already. Nevertheless I could not observe many other GIS application working with Earth Explorers. "Probably there still is too less time for GIS companies and they try to slowly approach the integration of those Earth Explorers in their own web-GIS solutions. Nevertheless you can see the boost of free web-map clients and 3D earth navigation that has been activated by the Earth Explorers", says Daniel Öfele, GIS researcher at TU München, the Technical University of Munich. Autodesk's MapGuide, Intergraph's WMS-Viewer and the ArcExplorer from ESRI are just some of them. Definitely they already existed before Google Earth came up, but now the GIS companies are working hard to make them better.

## Location Based Services

A really smart development could be found at the booth of NAVXS. They offer a Java application for mobile phones that can locate the phone and send this information to a central server. The location is used to request maps

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from Earth Explorers like Google Maps, MS Maps, Yahoo Maps and Ask Maps and sending them to the mobile phone. It is a fast and promising application usable for many location based services. The presented application is a friend finder where one can locate himself and his position will be shown on all of his friends' mobile phones. The claim of fame is that this service is for free. The only requirements are a GPS-enabled mobile phone and a mobile Internet connection. The combination of web mapping services and mobile phones conceals a still fallow potential. As Lars Mohr, scientist at the University of Munich, points out: "Geodata is becoming increasingly popular thanks to attractive applications such as internet-based map services" and Christoph Langewisch from NAVXS adds: "One future of these services is their fusion with mobile devices and position finding."

### Geoportal Solutions

A geoportal is the concept of having a main access point to a collection of geodata and services that are offered by an institution or a private company. All services and data are available via the Internet. A geoportal provides the user with tools for retrieving metadata, searching for geodata and visualising it via web map clients. Geoportals can give access to company-wide and region-wide geodata. National Geodata Infrastructures (GDI) are based on various connected geoportals that represent the national geodata stock. Geodata infrastructures consist of geodata, networks, services and norms for accessing the data. Some GDI projects were present at the INTERGEO, and the share of GIS companies who sell complete GIS-portal packages is increasing again this year. This support and the acceptance of many customers is one more step to the ambitious aim of establishing a European Spatial Data Infrastructure that covers a broad range of area-wide geodata and geoprocessing services available by the Internet for every customer.

### 3D Maps

'The future of maps' that's what RSS – Remote Sensing Solutions GmbH, promises with its photorealistic 3D city maps and landscape maps. Many companies such as Viewtec and 3D Geo GmbH offer these 3D maps and applications to visualise them. Even the possibility

to include other geodatasets sometimes exists in their products. 'A better look than Google Earth' promises Intermap and they keep their promise. Google's Earth Viewer seems to have fired this segment of the GIS-market as previous INTERGEO trade fairs have never shown so many 3D landscape viewers.

### Open Source Products

At INTERGEO 2006 the first Open Source Park has been established by the Open Source Geospatial Foundation (OSGeo). It has been somewhat an oasis of the fair with wooden booths and the coffee lounge where one could listen to presentations about projects and solutions developed by the international free software community. The focus of the lectures has been on established software packages like PostGIS, UMN MapServer or Mapbender and their field of application as well as security aspects and new applications.

### Microsoft, Google and Intergraph

While their applications have an enormous impact on the dynamics of the GIS sector it seems quite curious that neither Microsoft nor Google had a booth on this year's INTERGEO. It probably shows the dissentient attitude towards the creation of value out of geodata and geo-processing. As their business model focuses on location based advertisement the earth explorers are just a vehicle and not the product itself. Except for some external booths with small Intergraph presence Intergraph was absent. In fact it's not that astonishing as they

organised an ephemeral GIS information event in Munich's football stadium on the 11th of October. During lectures, workshops, extensive catering and a panel discussion all participants could catch up with software products and user cases.

### Conclusion

All in all the INTERGEO 2006 offers good insight into the dynamics of the GIS market. There is a strong focus on web based services which will support the construction of regional, national and international Spatial Data Infrastructures. The geo web-services will contribute to the development of mobile services combined with the use of Global Navigation Satellite Systems for positioning like the upcoming Galileo. The hype about Earth Explorers starts to fade away a bit and the GIS sector is adopting their most popular concepts like 3D landscapes and visualisation of geodata on the virtual globe. I am already looking forward to INTERGEO 2007 that will take place in Leipzig. But now after a three-days stimulus satiation I better have a look outside again or take INTERGEO's most popular give-away, the ESRI folding chair, and have a rest somewhere in the exhibition halls. This is in a way a mobile service, too.

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*Trimble's Formula one racing car simulation.*