

Review



Intergeo Congress and Trade Show

The Annual Central Geomatic Event in Continental Europe By Mathias Lemmens, Editor, GIM International

The Intergeo Congress and Trade Show, held in Frankfurt am Main, Germany from 16th to 18th October, attracted more than sixteen thousand professionals from all over continental Europe, including middle and eastern European countries. Intergeo covers the entire geomatic business, ranging from geodata acquisition technology and GIS technology to geospatial service provision aimed at offering solutions to a wide variety of public and private issues. This review gives an impression of the Trade Show, as well as the Congress.

The trade show was spread over two floors of Hall 9 of Frankfurt's huge 'Messegelände'. Virtually all topics concerning geo-information were represented, including image acquisition from space and air, GPS, total stations, levelling instruments, close-range 3D laser mapping systems, photogrammetric processing equipment, GIS Technology, remote sensing image processing systems and scanning and plotting devices. In addition to this horizontal cross-section through our profession, many local ser-

vice providers exhibited their facilitating products. Using advanced geodata acquisition and GIS technology, these providers support the finding of solutions for spatial issues with which the public sector gets increasingly confronted. The public sector involved here bears names such as 'urban planning division', 'public green section', 'facility management', 'department of transport', 'real estate cadastre', and 're-allotment project team'.

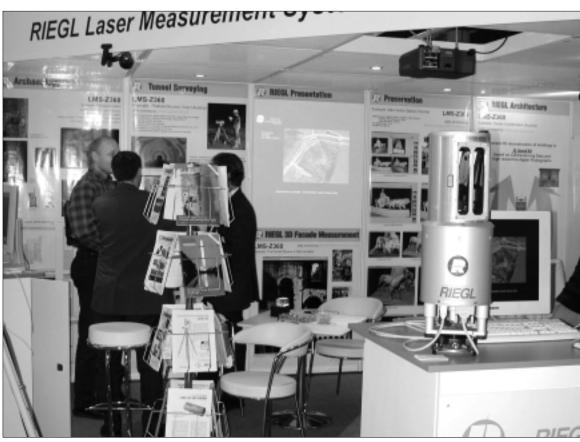
Real Reality

An on-going tendency is the attempt on the part of leading firms to cover the entire horizontal spectrum of the geomatics field by establishing partnerships. The vitality of this movement was clearly demonstrated by Leica Geosystems and ESRI, who in a brotherly fashion shared the same compartment — a hall within a hall — separated from the rest of the floor by huge linen partitions. Inside the stand, the linen served as movie screens onto which outdoor scenes were projected. By means of sand, trees, shrubs and raw wooden tables the effect was created of



Leica Geosystems and ESRI share in brotherly fashion a hall within a hall, separated from the rest of the floor by huge linen partitions.





To count the number of firms exhibiting laserscanning technology on both floors required the fingers of both hands.

the outdoor scene realistically continuing indoors: a perfect flow from real to virtual reality.

Firms whose ambition it is to become front player in the entire vertical market of a specific segment of the geomatics market were also present. As a representative example, mention must be made of Thales Navigation. In order to serve the entire GPS market, ranging from surveying and navigation to the massive (recreational) consumer market, Thales Navigation has realised several mergers and acquisitions, including those with Ashtech and Magellan.

Laserscanning

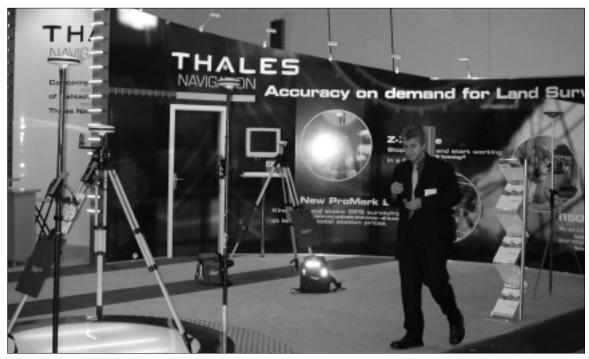
Notwithstanding the above, were I to have to characterise the event with just one word, I would not hesitate to let slip that of 'Laserscanning'. Laserscanning, or more precisely 3D close-range laser mapping, is a new geo-data acquisition technology able, within short time spans, to create highly detailed and accurate three-dimensional point clouds of a wide variety of objects, including construction works, industrial plans, cultural heritage, and buildings. To convert the point cloud into meaningful 3D CAD models, the set of points needs to be imported into a powerful PC equipped with advanced CAD modelling and fitting algorithms. This is really a rapidly emerging

technique the range of potential applications for which is continually expanding. Possibly, it will become part of the standard equipment of the land surveyor, in particular in those countries where 3D cadastres are in the process of emergence. A 3D cadastre breaks with the convention, usual in most countries, that ownership right is unlimited in the vertical dimension. The new concept is one of ownership, or other real estate rights, pertaining to spatial volumes lying one on top of another. As a result, objects like tunnels, parking garages, shopping malls or underground stations and offices have to be measured and registered in their full three-dimensional extension. The laser mapping system may turn out to be the appropriate system for mapping this type of object. To count the number of firms exhibiting 3D close-range laser mapping systems required the fingers of both hands.

Congress

Although the Trade Show attracts most visitors and is hence the focusing point of the event, Intergeo also boasts a congress. This year the congress covered many important issues including:

- Geo-information infrastructure
- Remote Sensing topics
- Cadastral issues



By establishing mergers as with Ashtech/Magellan, Thales Navigation prepares for a future of global competition.

Geomatics Education in Germany within the framework of Europe

We focus here on the last of these: geomatics education. As is the case in many wealthy countries, Germany too is genuinely worried about the diminishing number of highschool students who opt for a technical education. Indeed, high-school students in Western countries receive a plethora of signals telling them that to travel the long and dusty technical road is not the best way to prosperity. High-school students expressing the wish to commence with a technical course of study may even encounter reactions of compassion and sympathetic head-shaking. In developing countries and countries in transition the attitude with respect to technology among youngsters is completely different. There, technological knowledge is respected as the right route to the top. For example, in Poland the relative number of technology students is four times as high as it is in Germany. This divergence should truly be a subject of great concern to Western countries.

BaMa

Although the governments of many European countries are signatories to what has become known as the 1999 Bologna Declaration, which for harmonisation reasons adopted the Anglo-Saxon Bachelors/Masters (BaMa) struc-

ture of higher education, the universities of Germany seem to be reluctant to launch this system. In contrast, the 'Fachhochschulen' (HTO) seem to have embraced the BaMa structure. Indeed, it appears that they feel quite comfortable with it, probably not least because it provides them with the opportunity to set up not only curricula leading to a BSc degree, but also MSc curricula. The reluctance on the part of German universities contrasts too with universities in other European countries. In The Netherlands, for example, the Geodesy Department of the Delft University of Technology in September 2002 began a full-time international course in Geodetic Engineering, including two related programmes: geomatic engineering and geo-information engineering & land management.

With the 2002 Frankfurt Congress and Trade Show, the annual Intergeo has proven once again that it is the place to be for European geomatic professionals. It appears too that geomatics professionals are becoming increasingly aware of the value and magnitude of this massive event. The next Intergeo will be held in Hamburg, Germany, from 17th-19th September 2003.

This review has also been published in the December 2002 issue of GIM International.