

# Intergeo 2007 - Preview

Year after year Intergeo demonstrates how exceptionally flourishing is the geo(infor)matics business. Geo(infor)matics is all about improving human understanding of the earth, enabling management and staff in both public and private sectors to make better decisions and take optimal action. And Intergeo is all about the means of acquiring and processing the necessary geo-information.

This year marks the thirteenth consecutive running of this major conference and trade-fair for geodesy, geoinformation and land management. The venue shifts from year to year, always within the boundaries of Germany. Last year the event took place in three halls at the New Munich Trade Fair Centre, parallel to and integrated with the XXII FIG Congress. Nineteen thousand visitors were counted through the entrance gates in Munich, and this year in excess of seventeen thousand visitors and delegates from more than eighty countries are expected to meet in Leipzig between 25th and 27th September 2007.

Claimed to be the largest international conference and trade-fair in the world for geodesy, geo-information and land management, this event is organised by HINTE GmbH in association with the German Association of Surveying (DVW) and takes place in conjunction with the fifty-fifth German Cartographer's Day. Official congress sponsor is Trimble. By offering a mixture of seminars, forums and exhibition, Intergeo provides professionals with the opportunity to obtain a broad overview of innovations, developments and trends.

The Intergeo offers good insight into the dynamics of the survey and GIS market, and this exhibition preview is designed to give potential visitors a glance over the specialities and novelties; it is not meant to be a comprehensive list of exhibitors. The number of Chinese manufacturers of survey equipment increases by the year. Surveying without add-ons is impossible, and Intergeo is the place to find the largest variety of nails and markers, tapes and rods, prisms and prism poles, tripods and tribrachs, paint and tape, safety-jackets, helmets and every other gadget that eases the daily work of the surveyor. Polytechnics and universities of technology, not only German but also from many other countries, will present their educational programmes. Since 1999, as a result of the Bologna Declaration, there has been increasing competition among polytechnics and universities for students, and marketing has become an essential strategy. Presence at Intergeo is a very good marketing opportunity and will probably become a future prerequisite for survival.

## 3D Geo

3D Geo GmbH (Germany) is a spin-off of the renowned Hasso Plattner Institute for software-systems technology. The company develops and sells software solutions for real-time 3D visualisation, management and delivery of geo-information. 3D Geo will present its entire product range: desktop products for composition, presentation, exploration and analysis of geodata in real time, server products for the management of complex geodata used for infrastructure purposes, and software development products for integrating LandXplorer into third-party IT systems. Google Earth solutions for the integration of 3D geodata into Google Earth will also be shown.

[www.3dgeo.de](http://www.3dgeo.de)

Stand number: B1.214

## 3D Laser Mapping

3D Laser Mapping (UK) will be launching new laser-scanning hardware solutions including 3D-R1, a laser-scanning robot for use in inhospitable/inaccessible areas, and the latest Riegl long-range laser profiling system. The company will also demonstrate the latest versions of StreetMapper, the mobile mapping system for use on the ground and now in the air too. Demos will be held of SiteMonitor, a system for monitoring rock faces, landslip and other manmade structures, including Volume Monitor for automatic calculation of regular volume measurements in the mining industry.

[www.3dlasermapping.com](http://www.3dlasermapping.com)

Stand number: D1.407

## 52°North

52°North - Initiative for Geospatial Open Source Software GmbH (Germany) is an international research and development company promoting the conception, development and application of free, open-source geo-software. It brings to the show three products. First, the quality assured 52N Security System, which provides access control for OGC Web Services such as Web Mapping Services (WMS) or Web Feature Services (WFS) without sacrificing their interoperability. Secondly, 52N Sensor Web Services for integrating sensors and sensor systems into Spatial Data Infrastructures. The Sensor Observation Service enables interoperable, web-based access to sensors and real-time geosensor data. The third product is ILWIS 3.4 Open, PC-based GIS and Remote Sensing software developed by ITC, a complete package of image processing, spatial analysis and digital mapping.

[www.52north.org](http://www.52north.org)

Stand number: K3.302

## ADW Software

ADW Software (Belgium) will showcase Pythagoras GIS+CAD: a graphical interface based on Pythagoras software for survey and civil engineering applications. The new software is dedicated to the implementation of GIS and has been designed for local authorities, cadastral services, utility companies, urban-planning and scientific research. Its application is to analyse and visualise spatial information without being limited to geographical objects only.

[www.pythagoras.net](http://www.pythagoras.net)

Stand number: C1.307

### **AKG Software Consulting**

AKG (Germany) provides VESTRA, a software solution for road and railway design, sewer design, and surveying. It is the standard design software used by many government agencies and engineering consultants. New release VESTRA Civil 3D 208 is the Roadway-Design Plug-in for AutoCAD Civil 3D 2008. Wizard interfaces help accomplish complex design tasks such as junctions, intersections, roundabouts and turnarounds/cul-de-sacs. According to VESTRA's key concept of geometric relationships between design elements, updates in any one place are instantly reflected in any object. This dynamic engineering model makes changes faster and easier.

[www.akgsoftware.de](http://www.akgsoftware.de)

Stand number: K3.305

### **ASTEC**

ASTEC (Germany) is a geodata provider offering digital geodata collected by digital line-camera system ADS40 and/or Lidar system ALS50. Apart from high-resolution Lidar elevation models, standard products are multi-spectral digital orthophotos in PAN, RGB and CIR, providing 12-bit four depth and full geometric resolution in each spectral channel (no PAN-sharpening). Ground sampling distances (GSD) of imagery is between 10cm and 50cm. The latest product is RGB True Ortho photos, in which 3D-objects show no lean. True orthophotos allow correct superimposition upon other geo-referenced information such as city plans and cadastral plots.

[www.astec-geodata.com](http://www.astec-geodata.com)

Stand number: E1.522

### **Blom**

Blom, Europe's largest provider of aerial imagery and geospatial data, has acquired high-resolution, geo-referenced oblique aerial photography of nine hundred European towns and cities with populations in excess of fifty thousand.

Pictometry oblique imagery provides a new way of visualising the urban environment by providing multiple side-views of each location. Specific uses include municipalities, online directories, security/military, and personal navigation systems. Image libraries will be available for download/viewing, and Blom will be launching a range of web-browsers with application-specific tools. The company will also be demonstrating on the stand its main service activities.

[www.blom.no](http://www.blom.no)

Stand number: D1.414

### **Blue Marble Geographics**

The Blue Marble (ME, USA) professional services team assists users in creating custom GIS applications for image georeferencing, image reprojection, coordinate conversion, vertical transformations, vector and raster translation, image and map-file display and GPS data collection. The company's data-conversion technology and services are used worldwide by thousands of GIS analysts in software companies, universities, oil & gas companies, civil engineering, survey, technology, enterprise GIS groups, government and military organisations.

[www.bluemarblegeo.com](http://www.bluemarblegeo.com)

Stand number: I3.111

### **Cadcorp**

Cadcorp (UK) will be showcasing the latest versions of its SIS - Spatial Information System product family, which encompasses desktop GIS modules, web-based GIS software (Cadcorp GeognoSIS), software developer kits (SDK), and a mobile data capture solution (Cadcorp mSIS). Cadcorp will be joined on its exhibition stand by German partners gisME and Promegis GmbH.

Established in 2004, gisME offers services for GIS and supports users in setting up geodata infrastructures. Promegis GmbH is a company internationally active in the field of GIS and image processing. As developers of software applications Promegis provide individually tailored consulting services, applications and software solutions for public security, public administration, the economy, and various other industry sectors.

[www.cadcorp.com](http://www.cadcorp.com)

Stand number: C1.305-1

### **CEGI**

The CEGI Center for Geoinformation GmbH (Germany) is an objective consultancy. As a communication and co-ordination platform CEGI stands for the development of innovative spatial-data use in the economy, science and public authorities. CEGI offers consulting mainly in the areas of development of spatial data infrastructure, marketing for spatial-data, and design of information systems. CEGI is the central advisory body and co-ordination organ for different initiatives and operates in the role of centre of competence as a service provider with attention for project management, conceptual design, organisation, marketing and public relations.

[www.cegi.de](http://www.cegi.de)

Stand number: E1.508

### **COWI**

COWI (Denmark) is a leading geodata provider in aerial surveying, orthophoto, vector map, height model, laser scanning, 3D visualisation, land-administration and GIS, and IT solutions. The company provides mapping services and geographical information systems for businesses in a wide range of market sectors. COWI's mapping-related services encompass airborne data capture (Vexcel cameras, laser scanning and oblique systems), aero-triangulation, orthophoto processing, production of terrain models, 3D-city models and all other aspects of photogrammetry. The company will show on the stand very detailed laser-scanned data, high-resolution orthophotos, and oblique photos.

[www.cowi.dk](http://www.cowi.dk)

Stand number: C1.302

### **Cremer Programmentwicklung**

Cremer Programmentwicklung (Germany) presents version 2.2 of Caplan, providing a comprehensive range of survey processing functions, e.g. field-data processing, computing coordinates, network adjustment, creating a DTM and calculating volumes. Besides standard field-data formats (like Leica, Trimble, Topcon, Sokkia) a variety of further other data formats are supported. A powerful plan window assists in generating plans and offers image processing and DXF data exchange. Caplan is available in both German and English. The basic module can be extended with a whole host of extension licences allowing customisation.

[www.cpentw.de](http://www.cpentw.de)

Stand number: G1.722

### **Diamond Airborne Sensing**

Diamond Airborne Sensing GmbH (Germany) will be showcasing its DA42 Multi-Purpose Platform (MPP), suited for carrying multi-functional aerial sensors. This solution is tailored and ready for deployment, delivered direct from the aircraft manufacturer. The company shares a stand with Microsoft Photogrammetry, showcasing its UltraCamX System featuring simpler data flow and more robust technology; 3:1 pan-sharpening ratio is strictly maintained and frame rate is the fastest in the world of large-format digital cameras.

[www.diamond-sensing.com](http://www.diamond-sensing.com)

Stand number: E1.509

### **Digimundo**

Digimundo is a Portuguese GIS software development company focused on providing integrated GIS agricultural solutions. It will be showcasing DMAgriGest, the new module for its integration framework DMAgri. DMAgriGest is farm-management software that incorporates all the benefits of GIS in everyday farm-management activities. The structure of the information is open and flexible, allowing individual customisation. Its features include definition of farm characteristics and digitisation of parcels, integrated analysis and reporting of financial and technical actions, correlation of costs, revenues, activities and dates with specific parcels and crops, and managing stocks and farm finances.

[www.digimundo.net](http://www.digimundo.net)

Stand number: L3.416

### **DMT**

DMT GmbH (Germany), as co-exhibitor of Leica Geosystems presents the latest innovation in gyro-surveying: Gyromat 3000. This fully automated precision gyroscope makes it possible to measure true north at optimum accuracy of 1mgon in just ten minutes. The Gyromat 3000 can be equipped with nearly every theodolite or total-station and is now available with optical centring system. It allows wireless remote control and data transmission via Bluetooth.

[www.dmt.de](http://www.dmt.de)

Stand number: F1.612

### **Fugro GeoSpatial Services**

Services presented will be airborne laser scanning, terrestrial scanning, terrestrial survey and dimensional control. OmniSTAR, member of the Fugro Group of companies, delivers commercial DGNSS services worldwide by satellite, and designs and develops Differential GPS positioning technology. It will present its HP receivers. Fugro partners clients needing survey, positioning and geotechnical solutions for both on- and offshore applications. With more than 45 years experience and more than ten thousand specialists and consultants, the company offers a unique combination of advanced geospatial information services. Fugro NV has 275 offices in more than fifty countries.

[www.fugro.nl](http://www.fugro.nl)

Stand number: M3.511

### **F.W. Breithaupt & Sohn**

Besides standard instruments, Breithaupt will show a great variety of survey instruments for special applications. These include educational, compass, mining suspension theodolites, pilot balloon theodolites, first-order level with micrometer reading of 0,02mm, and optical hand clinometer. Also on show will be telescopic alidades, plane tables, orientation, geological and surveying compasses, electronic compasses, adjusting collimator, double-image comparator, and precision optical plumbing instrument. Track-measuring instruments, alignment telescopes, sag-measuring instrument for open-air transmission lines, laser-impulse distance-measuring equipment, quarry pulse laser, azimuth bases and various laser range finders will be exhibited.

[www.breithaupt.de](http://www.breithaupt.de)

Stand number: H1.812

### **General Dynamics Itronix Europe**

General Dynamics Itronix Europe Ltd (UK), a General Dynamics company since September 2005, is a developer of wireless, rugged computing solutions for mobile workers, offering a full range of wireless field computing systems, from handhelds to notebooks to tablet PCs, mobile servers and thin clients. The company will showcase two new products. GoBook MR-1 is a fully rugged, ultra-portable notebook that combines all the functionality of a fully featured notebook with multi-wireless communications technology in a compact, use-anywhere 4.5"x 6.1"x 1.4" new, game changing form. GoBook VR-2 Notebook, is the first semi-rugged notebook optimised for vehicle-deployed workforces with new DynaVue all-light viewable display technology.

[www.gd-itronix.eu](http://www.gd-itronix.eu)

Stand number: C1.321

### **Geokosmos**

Geokosmos will be showcasing its extended 3D Modeler, developed in 2003 as a software tool for visualisation and fast processing of raw survey data collected by means of Lidar and digital aerial imaging technologies. The software functionality has now been extended, making it suitable for creating a wide range of output products, from large-scale topographic maps to 3D-photorealistic digital surface models. Key features of the software are high-speed large-volume data processing, user-friendly interface, smooth integration of software into work cycle, and compliance of results with existing requirements.

[www.geokosmos.com](http://www.geokosmos.com)

Stand number: C1.316

### **GeoVirtual**

GeoVirtual (Spain) will introduce its new 3D technology. GeoVirtual V.3 is the climax of ten years experience in 3D-visualisation, enhancing the power of previous technology. This is second-generation technology designed for high performance in demanding professional situations in geo-spatial data management. Some characteristics are the complete Solar system in 3D, simultaneous management of datasets dispersed in different servers, very high performance of more than 100fps, sub-centimetric precision, meteorological and lightning effects, multi-resolution vector layers, and high-performance 3D-cities and vegetation.

[www.geovirtual.com](http://www.geovirtual.com)

Stand number: I3.139

### **Hemisphere GPS**

Hemisphere GPS Inc (formerly CSI Wireless Inc) designs and manufactures GPS products for positioning, guidance, and machine-control applications in agriculture, marine and other markets. The company owns leading brand names, numerous patents and other intellectual property and will be showcasing two new products. The Crescent R100 Series DGPS receiver which features sub-metre performance with standard SBAS differential and Hemisphere GPS exclusive COAST technology that maintains accuracy during temporary loss of differential signal, and the new Crescent XF100 series DGPS receivers for rugged handheld computers, providing superior accuracy and performance.

[www.hemispheregps.com](http://www.hemispheregps.com)

Stand number: I3.115

### **Image Access**

Image Access (Germany) develops and produces tailor-made solutions, controllers, optoelectronics and complete scanning devices for the international imaging market. It will show the large-format colour scanner WideTEK 36 for documents up to 36 inches wide (915mm). This scanner combines user-friendliness, production-ready design and compact dimensions. The Scan2Net technology from Image Access forms the basis of the integrated user interface: intuitive to use through touch-screen or web-browser. The camera technology, consisting of a dust-protected, hermetically sealed camera box holding three CCD systems, delivers optical resolution of 1,200 x 600dpi.

[www.imageaccess.de](http://www.imageaccess.de)

Stand number: L3.411

### **Infoterra**

Infoterra GmbH (Germany) is to present its extensive portfolio of TerraSAR-X Services for the new German radar satellite TerraSAR-X. The company holds exclusive commercial exploitation rights for TerraSAR-X, launched on 15th June 2007, and delivered the first imagery four days after launch, impressively demonstrating the capabilities of the satellite system. In late 2007 the spacecraft will reach operational stage and Infoterra provide new-quality radar data as well as a variety of radar-based geo-information products. A global distribution network secures reliable and efficient international distribution.

[www.infoterra.de](http://www.infoterra.de)

Stand number: B1.212

### **Ingenieurgesellschaft Nordwest**

Visitors to the Ingenieurgesellschaft Nordwest mbH stand will find a consulting company founded in 1978 and now employing more than 85 professionals at its permanent offices in Oldenburg, Berlin, Magdeburg, Wurzen and Pfaffenhofen. Fields of activity covered are feasibility studies and reports, regional planning, soil investigations, survey work and GIS, preliminary and detailed design in architectural and civil-structural disciplines, and complete responsibility for a project from concept to completion.

[www.ing-nordwest.de](http://www.ing-nordwest.de)

Stand number: H1 1.806

### **Intermap Technologies**

Intermap Technologies (CO, USA) is creating uniform 3D-digital models of the earth's surface to build a library of affordably priced elevation data and images of unprecedented accuracy. The company's NEXTMap Europe-Germany mapping programme has successfully mapped the entire country. A variety of data, including digital terrain models, digital surface models, contours, triangulated irregular networks (TINs), and orthorectified images are currently available.

[www.intermap.com](http://www.intermap.com)

Stand number: B1.204

### **Latschbacher**

Latschbacher (Austria) is a producer of rugged handheld computers (PDA) under the brand name TimbaTec, mainly used in forestry, geodesy, construction, service & maintenance, and transport & logistics. The company focus is with its partners to deliver complete mobile solutions for businesses within a European perspective, and to offer full service and support. The company is showcasing two products.

The first is TDS Nomad, a rugged, outdoor handheld computer with integrated Bluetooth, GPS and 801.11g wireless, built-in digital camera and barcode-scanner. And Algiz 8, a Tablet PC featuring 1.0GHz ULV M processor, 40-GB hard drive and 512Mb to 1GB RAM. Microsoft Windows XP Professional operating system runs all applications familiar to PC users.

[www.latschbacher.de](http://www.latschbacher.de)

Stand number: J3.215

### **Leica Geosystems**

With Leica TPS1200+ Leica Geosystems presents the successor to the TPS1200 total-station, a reflectorless EDM with combined range, accuracy, laser-dot size, and measurement time. It works with improved Automatic Target Recognition (ATR) sensor that tracks and follows the prism with more accuracy and reliability than ever before, and is of course fully compatible with all System 1200 products. The Leica ScanStation 2 features a tenfold increase in maximum instantaneous scan speed and the full freedom and accuracy of a total-station. This boost in speed and productivity builds on the versatility of the ScanStation class of laser scanner to make High-Definition Surveying (HDS) profitable for even more as-built and topographic survey projects. Also showcased are the Leica SmartPole, Leica ALS Corridor Mapper and Leica LINO L2.

[www.leica-geosystems.com](http://www.leica-geosystems.com)

Stand number: F1.612

### **Leica Geosystems GI**

Leica Geosystems Geospatial Imaging (GA, USA) offers a broad range of interoperable workflow solutions for [photogrammetry](#), mapping, remote sensing, 3D visualisation, catalogue management and exploitation of geospatial imagery across the enterprise. Leica Geosystems is highlighting Leica Photogrammetry Suite (LPS) 9.1, an integrated photogrammetric product for preparing data, and Leica Virtual Explorer, a 3D-visualisation tool.

[www.gi.leica-geosystems.com](http://www.gi.leica-geosystems.com)

Stand number: DI.438

### **Microsoft Photogrammetry**



Microsoft Photogrammetry is showcasing its UltraCamX System, featuring simpler data flow and more robust technology. The 3:1 pan-sharpening ratio is strictly maintained, and frame rate is the fastest in the world of large-format digital cameras. The company shares a stand with Diamond Airborne Sensing GmbH (Germany) which is showcasing its DA42 Multi-Purpose Platform (MPP).  
Stand number: E1.509

### **Moscow State University of Geodesy and Cartography**

The Moscow State University of Geodesy and Cartography presents the Universal Metrology Complex (UMK-M) and demonstrates a panoramic camera. The UMK-M is an integrated calibration system for certification of optical and optoelectronic geodesic instruments, including electronic tachymeters, range-finders, laser tapes, and digital levels. Range-finders can be calibrated with an accuracy of 0.2mm, horizontal circles with an accuracy of 0.2", and digital levels with an accuracy of 0.01 mm. The UMK-M enables a user to certify each metrological characteristic of the instrument with only one setting. The panoramic camera enables creation of still and streaming-round views and can be used as the imaging component of many applications, including endoscopy systems, monitoring of high-speed processes, and in aircraft navigation systems.

[www.miigaik.ru](http://www.miigaik.ru)

Stand number: A1.109

### **Nebel & Partner**

Nebel & Partner (Germany), a surveying and GIS company with activities both on the home market and internationally, focuses on mapping, production and improvement of spatial data, GIS, consultancy and technical assistance. Completed and ongoing projects include laser scanning (Lidar), orthophotos and true-orthophotos, digital terrain models (DTMs), 3D-city models, topographical mapping, and Information Management and Property Registration etc.

Together with partner TopEye AB, the company provides services for planning, realisation and evaluation of laser-mapping projects. TopEye technology is focused on high-resolution Lidar and image solutions and is a leading helicopter-based technology for demanding engineering applications. Nebel&Partner will present examples and results from the latest airborne laser-scanning projects for high-precision engineering projects.

[www.nebel-partner.de](http://www.nebel-partner.de)

Stand number: D1.417

### **OCAD**

OCAD will be showcasing OCAD, a software program for drawing maps of all types. OCAD comes in two editions, standard and professional. The professional edition provides additional functions for database connections, compilation of street indexes and interactive internet maps for recording real-time GPS measurements, exporting Shape, DXF, and SVG files and rasterising maps. OCAD is being used in more than sixty countries and in a great variety of sectors: national cartography and topography institutes, land-survey offices, cities, communities, fire brigades, graphics firms, planning and engineering offices, schools, universities, the military, sport and recreation clubs, etc.

[www.ocad.com](http://www.ocad.com)

Stand number: I3.155

### **Oxford Technical Solutions**

OxTS (UK) is to launch its new Inertial+, an inertial measurement system compatible with external GPS-receiver to give highly accurate position and orientation data. The Inertial+ provides smooth output without GPS jump or dropout, even near trees or buildings, making it ideal for survey applications. Inertial+ outputs data over CAN bus, serial and ethernet in real time. Applications include land/aerial survey, remote sensing, road profiling, asset management and GIS data acquisition. Adding Inertial+ to a GPS-receiver provides smooth position data in difficult GPS environments and highly accurate output measurements like roll, pitch and true heading.

[www.oxts.com](http://www.oxts.com)

Stand number: M3.507

### **Pentax**

The Evolution Series was the start of a new era for Pentax; new instruments with higher performance, improved functionalities and more ease of use. The V-200 Series, for growing markets, and the W-800 Series, with its Windows.CE interface and open platform, were perfect examples. Following this path, Pentax will launch two new Evolution Series, the V-300 Series and a new type of V-200 Series. To match the Evolution Series, Pentax has decided to change the appearance of the existing levels, making them grey and red.

[www.pentaxsurveying.com](http://www.pentaxsurveying.com)

Stand number: C1.311

### **Phenix Optical Instrument Group Company**

Phenix Optical Instrument Group Company, with a total building area of 0.36 million square metres, five thousand employees and over two thousand imported instruments and high-precision machine tools, is a big integrated optical instrument manufacturer in China. The company carries out research and production covering optical manufacturing, dye making, high-precision injection moulding and surface decoration, etc. They will show their new products at Intergeo 2007.

[www.phenixoptics.com.cn](http://www.phenixoptics.com.cn)

Stand number: I3.109

### **Photo Mess Systeme**

Photo Mess Systeme (Switzerland), a guest on the Leica Geosystems stand, will show the latest releases of the well-known ELCOVISION 10 close-range photogrammetry suite, with new additions for virtual-reality modelling and forensic analysis. The highlight of the newest release is fully automatic image orientation for aerial and terrestrial photo blocks, which also generates a dense cloud of points directly suitable for DGM or surface modelling. The company will also display the latest releases of ELCOVISION 10 EITheo, the easy-to-use tachymetry suite for seamless integration of tachymetry into photogrammetry.

[www.elcovision.com](http://www.elcovision.com)

Stand number: F1.612

### **SETL**

Tianjin SETL Survey Equipment Co Ltd, one of the biggest Chinese manufacturers of auto-level, theodolite, laser cross-line and

accessories. As the first Chinese company in this industry its auto-level has been awarded National Inspection-exempted product's by the Chinese government. SETL will present all its products, including auto-levels, tripod, staves, tribrach, and tribrach adapter. The company will also introduce its newest theodolite and series of pocket laser markers.

[www.setlsurvey.com](http://www.setlsurvey.com)

Stand number: H1.820

### **Sivan Design**

Sivan Design (Israel) is to introduce CivilCAD Simulate software that provides real-time 3D simulation at a click. CivilCAD Simulate solution suite supports both AutoCAD and Bricscad and is easy to operate with a Windows-based interface. The software features user-oriented function toolbar menu, and flexible bi-directional import/export capabilities. CivilCAD solution suite covers the areas of survey and COGO calculations, topography, land development and earthworks-volume calculations, road construction and design, and water-engineering solutions.

[www.sivandesign.com](http://www.sivandesign.com)

Stand number: J3.235

### **Snowflake Software**

Snowflake Software (UK) will be demonstrating its GML Publishing and Loading tools supporting NEN3610 information models such as TOP10NL, IMRO2006, IMKICH and IMGeo, as well as CityGML, the open standard for 3D-city modelling. GO Publisher enables the translation of data from any database model into any given GML schema. Utilising a schema translation preserves the original model whilst enabling publication to multiple different GML schema. The data can then be served via single or bulk file or WFS. GO Loader enables the loading of any GML data into a relational database with connectivity to multiple GIS packages.

[www.snowflakesoftware.co.uk](http://www.snowflakesoftware.co.uk)

Stand number: E1.508

### **Stora Enso**

Stora Enso (Finland) will introduce EnsoMOSAIC software version 6.1 for aerial triangulation and orthomosaicking. The core of this software is new top-end automatic aerial triangulation that combines automatic tie-point location and block-adjustment routines, applying advanced feature extraction on pyramid images. The new functions calculate oriented images, orthoimages and orthomosaics with sub-pixel accuracy. Other new features include flight planning and orthomosaic management for ArcGIS v9, and export of EnsoMOSAIC blocks to ISAT format for stereo analysis with various external packages.

[www.ensomosaic.com](http://www.ensomosaic.com)

Stand number: C1.317

### **Suzhou FOIF**

FOIF (China) is to introduce the RTS/OTS 6800 series total-station, which integrates 32-bit CPU feature, fast data processing. It also supports the SD card memory system; 512-M memory is available to record huge volumes of points. Both RS-232C and USB communication ports can be used for data transfer. Also provided are many professional measurement programs, such as ROAD Layout, Traverse Adjustment, etc.

[www.foif.com.cn](http://www.foif.com.cn)

Stand number: B1.216

### **Tiltan Systems Engineering**

Tiltan Systems Engineering (Israel) is showcasing TLiD, stand-alone software for [Lidar data processing](#). The new product automates and reduces the time needed and costs involved in Lidar projects. Its main features are automatic extraction of DTM ("bare earth"), DSM, buildings and trees, fast parallel processing, no limitation on input file size, and it being a standalone product. Lidar data may be brought to the stand to test the product in real time.

[www.tiltan-se.co.il](http://www.tiltan-se.co.il)

Stand number: C1.317

### **Topcon Europe Positioning**

Topcon (the Netherlands) will present a complete family of imaging and scanning products, including the new GPT-9000ai Imaging Total Station combining Topcon's original imaging "through-the-lens technology" with existing robotic functionality and added advanced intelligent feature recognition, long-range reflectorless technology, and image-scanning features. Topcon will also introduce new models of the GR-3 GNSS receiver, a new range of total-stations, including a robotic upgrade for machine control, the new business-area mobile solutions, and several new software modules and packages.

[www.topcon.eu](http://www.topcon.eu)

Stand number: K3.324

### **Trimble**

Trimble (CA, USA) will present its portfolio of positioning solutions designed to work together to provide a seamless and streamlined workflow for all phases of survey and geospatial applications, from GNSS and GPS receivers, optical total-stations and 3D-scanning to VRS network infrastructure technology. Visitors will see demonstrations of Trimble Spatial Imaging solutions, with the recently introduced Trimble VX Spatial Station and Trimble GX 3D Scanner. Trimble GNSS solutions will also be showcased, including the Trimble R8 GNSS integrated receiver and its modular counterpart, the Trimble R7 GNSS system. The latter offers full GNSS support (Glonass and GPS Modernisation signals) and utilises a separate antenna in a configuration designed to support the unique way in which surveyors work. Trimble will demonstrate these latest solutions on the stand and show how the connected site can improve productivity.

[www.trimble.com](http://www.trimble.com)

Stand number: E1.532

### **Virtualgeo**

Since 1994 Virtualgeo (Italy) has been providing services in the fields of cultural and environmental heritage, using high-technology hardware and software tools. Its Informatics Department develops and trades software called CloudCUBE for managing data acquired by laser scanners (point-clouds) on AutoDesk family products. This software proves an integrated solution on the AutoCAD platform for managing and 3D-modelling the millions of points surveyed by laser scanner. The software provides several techniques for superficial modelling which allow the production of three-dimensional models with high accuracy and minimal number of polygons.

### **WhereGroup**

WhereGroup (Germany) will present GeoPortal.rlp ([www.geoportal.rlp.de/](http://www.geoportal.rlp.de/)). Geo-portals make map and feature services accessible and are the front-end to spatial-data infrastructures. This requires that all services follow the same standards, in the case of maps and geometric features as specified by the OGC, including metadata repository and search-and-management interfaces. Portal solutions are designed to improve accessibility for everybody, and offer privacy for the individual and security for the professional user. Geo-portal technology can be used to act as broker for any data, such as road network, land-use, natural resources, hiking trails, natural disaster-related locative information or an individual's current location. The added value of operating a geo-portal results from easier, more secure and comprehensive accessibility. The required metadata is registered by catalogue services and can also be administered via geo-portal interfaces.

[www.wherogroup.com](http://www.wherogroup.com)

Stand number: Open Source Park

### **Zoller + Frohlich**

Zoller + Frohlich GmbH (Z+F) (Germany) will present the IMAGER 5006, a phase-shift laser scanner for three-dimensional measurement of the environment, with an ambiguity interval of up to 79 metres. The standalone concept of cable-free scanning both indoors and out in very short scanning time is internationally unique. Z+F also presents the PROFILER 5006 for the survey of longish extended environments. It allows the spatial measurement of scanned profiles of the environment, done from a carrier vehicle perpendicular to the direction of motion. With high rotary frequency of up to 100Hz, this phase-shift laser scanner is highly suitable for uses requiring small distances between profiles of high accuracy. Z+F will also present novelties in its software product range.

[www.zf-laser.com](http://www.zf-laser.com)

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