



Risk Map in UK

ESI and Ambiental have formally announced that they have incorporated the **ESI National Groundwater Flood Risk Map** into **Ambiental's UKFloodMap4™**. Covering 100% of the UK, with a full range of return periods, and integrating the most up-to-date river flow and rainfall data, **UKFloodMap4** provides the most detailed flood maps currently available for the UK, greatly improving the way insurers assess flood risk at the individual address/building level. Groundwater flooding represents one of the most complex areas of flood risk modelling and is more difficult to predict than fluvial, pluvial (surface water) and coastal flood risk sources. It is one of the three largest infrastructural risks facing the UK in future years
www.esinternational.com www.ambiental.co.uk



Peter Fitzgibbon, Editor

What's in a name (or number)?

Technology wouldn't be what it is without the coining of new terms to tantalise us. That was certainly true of this year's INTERGEO expo in Stuttgart and where the term Geospatial 4.0 made its surprise debut.

Quite how the term originated – or when Geospatial 1.0, 2.0 and 3.0 fell by the wayside – is less than clear. But etymological niceties aside, Geospatial 4.0 is, it seems, the name of the game.

An expert panel assembled ahead of INTERGEO shed some light on the subject by agreeing that Geospatial 4.0 entailed the intelligent networking of sensors, data and services to generate new processes. Karl-Friedrich Thöne, President of the German Society of Surveyors (DVW) elaborated on this in his keynote at the INTERGEO conference. "The public, using smart devices, will increasingly act as the data providers of crowd-based geoinformation that will shake the ground below our feet for good," was his take, adding that the customisation and personalisation of user-focussed solutions stemming from Geospatial 4.0 will usher in a completely new era. "We are at the dawn of a new digital age," was his message.

In a subsequent interview, Gerd Buziek, First Vice President of the German Umbrella Organisation for Geographic Information (DDGI) pointed to better road traffic control, improved planning, the optimised distribution of goods, and the delivery of more personalised services as examples of how Geospatial 4.0 would make an impact.¹

Needless to say, the big beasts of the geo industry have been quick to latch onto the term. But the future will equally belong to those fleet-footed businesses such as Dotted Eyes, which has distilled 1,000 pages of fiendishly complex INSPIRE Annex II schemas and specifications into a simple, easy-to-use web app (of which more in our next issue), and start-ups such as GeoSpock, with its revolutionary data processing engine.²

1. http://www.ddgi.de/4dgm/download-4dgm/doc_download/1561-wir-benoetigen-experimentierraume
2. <http://www.geoconnexion.com/articles/its-data-jim-but-not-as-we-know-it/>

1Spatial helps to create a central source of geospatial truth for the City of Marseille

1Spatial helps **Marseille's GIS team** to simplify the administration and management of its geospatial data and tools. Geospatial data is central to many of the issues the city needs to manage and it has recognised that efficiently sharing authoritative data is an important function. Sharing data from many sources with a wide set of users quickly exposes any inconsistencies and the City had experienced some problems with data quality as a result. Together, **1Spatial** and **Pascal Giansily's** team (Marseille) developed a GIS solution that centered on a single, central data warehouse, an Oracle Spatial database, known to the team as the Unitor. The Unitor centralises all geospatial data, ensuring it is consistent, properly managed and authoritative. www.1spatial.com

Participation of GeoPlace in the National Apprenticeship Scheme is a 'win-win' experience

When **GeoPlace** was looking to expand its team it realised that company-specific skills and knowledge would be more valuable than general IT experience or qualifications. Which is why it looked to apprenticeship schemes, rather than traditional recruitment. Working within the **Government's Apprenticeship Scheme**, GeoPlace has so far employed three apprentices. The formal training received as part of the government funded scheme helps develop both technical and soft skills, and regular assessor visits keep things relevant and on track. It's not just GeoPlace which has benefitted from the experience, the three apprentices have also found the experience to be positive. GeoPlace is proud of the achievements of the apprentices that have been hired and found it overwhelmingly positive being able to offer permanent positions to the Apprentices that have completed the programme. www.geoplace.co.uk

ENVITIA MapLink Pro chosen by Tek Fusion Global to support advanced Mission Management

Tek Fusion Global (TFG) of **Williamsburg, Virginia, USA** has selected **ENVITIA's MapLink Pro** software to provide state-of-the-art map display capabilities in the next generation of **PATHFINDER™**. **PATHFINDER** is an internationally-deployed **Mission Management System (MMS)** with an easy to navigate interface to simplify and consolidate mission execution tasks, providing painless command and control of on-board navigation, communication, and peripheral electronic equipment. **MapLink Pro** enables users to embed high performance geospatial and mapping components within their systems and is optimised for tactical display environments. **Mike Johnston, Director of Program Management, Tek Fusion Global**, said "MapLink Pro was chosen due to the ability to fully integrate the mapping components with our tactical software and their responsive technical and sales support". www.envitia.com



New Drone Training School Opens with CAA Approved Training Courses

A brand new drone training school formed by a crack team accustomed to flying drones across Hollywood movie sets and commercial airliners across some of the busiest airspace in the world has opened. **UAV Air** is the brainchild of four senior airline pilots along with two of the country's most widely respected drone operators, **Cloud12** and **UAViate**. **UAV Air** has designed a series of courses which are built on the cornerstones of manned aviation principles. A carefully curated syllabus will equip the new breed of industry entrants eager to qualify in the rapidly expanding drone industry. **UAV Air** will offer a full schedule of courses with accessible three-day fast-track options, all approved by the Civil Aviation Authority (CAA). www.uav-air.com

Rezatec uses Earth Observation to measure Peatland for Northern Ireland Water

Rezatec has been working with **Northern Ireland Water** using its cutting edge Earth Observation (EO) techniques. The aim of the project is to look at the integrity of peatland in the catchment area and its risk to water quality, as well as to provide a prioritisation assessment for restoration activities. To measure peatland integrity **Rezatec** used a range of **Earth Observation** sensors from high resolution satellite imagery to ground based peat depth measurements, to analyse numerous aspects of peatland structure including the depth and volume of organic soil. The project has provided Northern Ireland Water with risk assessments to understand the extent to which the elevated quantities of carbon found in degraded peat are contributing to the level of water treatment required to achieve Drinking Water Standards. www.rezatec.com

iris360 captures businesses in 360 degrees for new Street View app

NCTech has announced that its **iris360** camera started shipping in September - in conjunction with the launch of Google Maps' new **Street View app**. **iris360** is fully integrated with Street View to allow users to capture and upload high-resolution panoramic photos directly via the app. Many businesses view 360-degree images as an important aspect of their online marketing. **iris360** is the only fully automated, panoramic camera system available today to deliver the 32 megapixel photo sphere resolution required under Street View | Trusted. As a certification program, Trusted focuses on recognizing professionals who consistently deliver their clients with the highest quality "photo spheres" of business interiors. www.nctechimaging.com

SSTL's DMC3 Constellation demonstrates 1-metre capability

The first 1-metre high resolution optical satellite imagery from the **DMC3/TripleSat Constellation** satellites has been released following the successful launch of the three Earth Observation mini-satellites in July and in-orbit commissioning and calibration by engineers from **Surrey Satellite Technology Ltd (SSTL)**. **Dave Parker, Chief Executive of the UK Space Agency** said, "Congratulations to **SSTL** on the acquisition of these one metre resolution images of our planet from the **DMC3** constellation - a real demonstration of technical precision. **SSTL's** expertise in small satellites plays a major role in the space sector's £3.6bn contribution to the UK economy through exports." **SSTL** has already manufactured a fourth **SSTL-S1** Earth Observation satellite for another customer and has a production line ready to deliver further satellites of this type. www.sstl.co.uk



Agriculture UAV Technology ROI When Compared To Traditional Methods

QuestUAV completely understand the risks involve in capturing survey data. By using the **UAV** process, it eradicates the issue of unaccessible survey sites, flying about 400 feet above ground level following the predetermined path while capturing **NDVI** images via its onboard sensor. The **UAV** is also equipped with a highly accurate **GPS** receiver. **UAVs** can cover large areas very quickly due to its faster cruise speeds and the lack of obstacles in its way. A survey can be completed in a matter of minutes, it is cheap to run and can operate most days of the year. It also allows a quick reaction time as most **UAVs** will fit in a standard car and come with very intuitive flight planning processes. The advantages of a **UAV** is clear evidence as to why this new technology is becoming so popular. www.questuav.com

OS Continues Its Paper And Digital Map Revolution

Sept 16 saw the latest phase in **Ordnance Survey's** rejuvenation of its paper maps with the release of its **Explorer range** - each coming with an exclusive mobile download and a cover image taken by the public. The **Explorers** follow the successful launch of **OS's 62 Outdoor Leisure (OL)** map titles. The 341 **Explorer** maps make up **OS's** largest range of maps, and the national mapping agency will complete the rejuvenation of all 607 of its map titles with the release of its **OS Landranger** maps in February next year. **OS's** modernising of its maps comes on the back of 2014's success that saw paper map sales increase for the first time in a decade. www.ordnancesurvey.co.uk