



ABPmer supports Environment Agency flood protection decisions on the Humber

ABPmer has been commissioned by the **Environment Agency** to provide a detailed understanding of past, present and likely future changes around **Read's Island** on the **Humber Estuary**. The study will help the Environment Agency determine what action they need to take to maintain current flood protection levels in the area. ABPmer are reviewing survey data, historical charts and previous studies undertaken during the last two decades, and develop a conceptual understanding of the changes that have occurred and the controls on the processes at work around Read's Island. The results will be used to focus on understanding what impacts are likely on the local defences in the future. www.abpmer.co.uk

One in four business drivers fear being replaced by driverless cars

One in four business drivers are concerned that they will be replaced by autonomous vehicles in their working lifetime, according to research from Masternaut, fleet telematics solutions provider. Driverless cars are currently being trialed on UK roads in Greenwich, Milton Keynes and Coventry, as ministers consider changes to the Highway Code to allow driverless cars to be used by the general public; although there is still uncertainty over regulatory and legislative implications. Masternaut surveyed 2,000 UK employees who drive as part of their job, to find out their attitudes towards driverless cars and the effect this will have on their job in the future. www.masternaut.com.

World's first Garden City looks to the future with GIS software from Cadcorp

North Hertfordshire District Council (NHDC) is migrating from a bespoke web mapping application to an off-the-shelf application from British software developer, **Cadcorp**. The upgrade will make interactive web mapping available to more than 300 council employees. NHDC's GIS Manager, **John Barnacle**, said, "We will be replacing a bespoke 32-bit web mapping application with a 64-bit version of Cadcorp's off-the-shelf product - **Web Map Layers 8.0**. It will bring us new functionality, a modern and responsive user interface, and we will have future-proofed our investment in GIS." Web Map Layers will be managed from the Council offices in **Letchworth**, a town of 33,000 people and the world's first Garden City. www.cadcorp.com

Quartix Named as one of Britain's Top Inspirational Companies

Leading vehicle tracking supplier **Quartix** is celebrating a fantastic month after announcing its maiden results as a public company on 3rd March, being named as one of the **1,000 Companies to Inspire Britain**, and last night winning the coveted **Business of the Year** accolade in the **Cambridge Business Excellence Awards**. Quartix saw continued growth in demand for its vehicle tracking systems, software and services last year, in both the insurance sector and its core fleet business. Total sales grew by 15.9% to £15.3M, with nearly 50,000 new tracking systems installed, and revenues from the fleet sector increased by 20%. **Quartix** had a strong year in the USA where the company opened an office in Chicago in April 2014. www.quartix.net



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Getting in a fix

Do you use a cash till? Have a smart meter? Employ a satnav for guidance? All rely on the positioning and timing functions of navigation satellites to do their job, as do many other technologies in daily use. And while we have become accustomed to 24/7 availability of their signals from 22,000 miles above us, their susceptibility to interference, intended or not, has far-reaching consequences – an issue explored in this issue

A perhaps lesser known vulnerability lies in the use of Global Navigation Satellite Systems such as GPS for what is termed social navigation, i.e., influencing people towards common objects or spaces based on the actions or findings of others.

Community-based networks such as Waze, use crowdsourcing to good effect in delivering what it describes as "a socially-informed GPS app for drivers." But what makes Waze's "live map" traffic reporting so attractive to its 50 million users also makes it a prime target for hackers.

The potential for spoofing (deliberately misleading) Waze users is highlighted in recent research conducted by four researchers at the Technion University in Haifa, Israel.¹

They revealed the ease with which Waze controls can be bypassed by peer-to-peer Sybil botnets to cause financial damage, compromise security, breach privacy and influence traffic flows and routing decisions, e.g., by creating non-existent traffic jams or diverting users away from phantom roadworks. While ways of mitigating attacks that balance simplicity, effectiveness and cost are proposed, the use of stronger registration and validation mechanisms would prove equally effective. However, this poses a dilemma for Waze which, like most social networks, needs a critical mass of users to be effective. As such, it requires a bare minimum of information for registration purposes.

With similar community-based apps from the likes of Moovit and Navmii, the cyber security aspect of satellite navigation is likely to join signal jamming as a key concern among the GNSS community.

1. *Exploiting Social Navigation*. Meital Ben Sinai, Nimrod Partush, Shir Yadid & Eran Yahav. Oct 2014.

(downloadable from www.slideshare.net/TopSecretSpyFiles/exploiting-social-navigation). See also <https://www.youtube.com/watch?v=coBl0PU6EQI>



Esri UK Announces Support for Walking with the Wounded, 'The Walk of Britain'

Esri UK has announced its involvement with **Walking with the Wounded's** latest challenge, the 1,000 mile 'Walk of Britain', designed to raise awareness of the nation's wounded veterans throughout the United Kingdom. As well as the **Official Mapping Partner** helping to plan the route, Esri UK will be the **Walking Partner** sponsor for the Scottish leg, the first leg of ten stages. The 'Walk of Britain' starts in August from the **Glenfiddich Distillery** in Scotland, through England and Wales to finish in **London** at the end of October. One of the key aims of the walk is for the team to engage with communities and share the importance of re-education and re-training of wounded service personnel, to help support their employment aspirations. www.esriuk.com

LSE recognises 1Spatial as one of Britain's Most Inspiring Companies

1Spatial plc, the spatial big data company was acknowledged for the second year running in **The London Stock Exchange's** (LSE) research report as one of the '1000 Companies to Inspire Britain', launched at the LSE opening. To be considered for inclusion in the report, companies had to meet a range of criteria. These included being UK based, having a turnover of between £6-250 million in the last 12 months and a minimum of three years in operation. Companies had to demonstrate not only a positive growth in revenue over the last four years, but also an increase in employee numbers, workspace, contract wins or patent filings. www.1spatial.com

ENVITIA Awarded G-Cloud 6 Supplier Status

ENVITIA has been awarded the status by **Crown Commercial Service** to supply **cloud based Geo Solutions** to the public sector on the **Digital Marketplace**. **G-Cloud** is a UK Government initiative to encourage the adoption of cloud based services across the entire public sector. The initiative is aimed to simplify the way that the public sector procures and delivers services and enables public bodies to procure standardised services from approved suppliers. ENVITIA have been an official supplier to the public sector through G-Cloud 6 since the 3rd iteration release in 2013 but the G-Cloud 6 offering includes an expanded range of software and services. www.envitia.com

UAViate will Manage Drone Filming for Blockbuster Sequel set in London

UAViate is the drone consultancy company of choice for a brand new **Hollywood blockbuster** being filmed in London. **London Has Fallen** is the sequel to **Olympus Has Fallen**, and the high profile job will involve drone filming around central London. The action thriller is set to be a huge hit with audiences worldwide, with a stellar cast including revered actors **Morgan Freeman** and **Gerard Butler**. The plot follows events leading up to the British Prime Minister's funeral, which all the world's most powerful leaders must attend - but a mass assassination masterplan is uncovered and must be stopped in its tracks. Filming using drone technology in central London will be challenging but **UAViate** are perfectly situated to rise to the job. www.uaviate.co.uk



Carlson Vehicle Transfer selects Intelligent Telematics for 3G camera solution

Carlson Vehicle Transfer (CVT) has adopted a **3G camera solution** from **Intelligent Telematics** designed to minimise insurance costs, reduce accident rates and support driver training. Under the agreement, the **IT1000** forward-facing camera will be fitted across all 142 vehicle transporters within the company's fleet to capture and provide immediate access to footage of any road incidents. CVT will now have complete visibility of all incidents across its vehicle transporter fleet via an online portal notification when an event has occurred. Video footage will then be available to defend against fraudulent insurance claims. This help to make significant financial savings and contribute to improved driver behaviour by using actual footage of driver-specific incidents as part of CVT's training strategy. www.intelligent-telematics.co.uk

Ordnance Survey adds four new products to its open data portfolio

The **OS** has released of four new exciting open data products. These products offer users increased detail and accuracy and the opportunity for analytics. They are fully customisable and can work together or be imported and integrated with the users own software and database. **OS Open Map Local**, a backdrop for users to map, visualise and understand their data. **OS Open Names**, a location search product for finding something fast. **OS Open Rivers**, an open water network showing the flow and the locations water across Great Britain. **OS Open Roads**, a connected road network for Great Britain. All 16 **OS OpenData** products are FREE to use for commercial, educational and personal purposes. www.os.uk/opendata