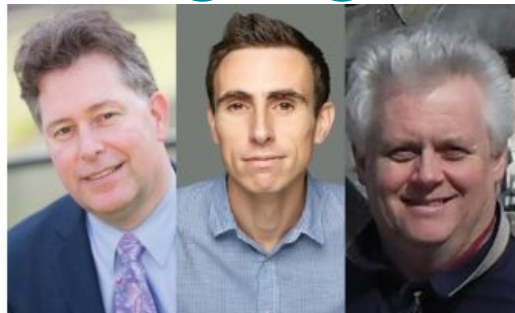


Earth Observation and UAVs - Imaging from the Sky



It was a pleasure getting this issue together – the theme Big Data sounds abstract and perhaps has first association with cloud computing, servers and other not-so-spatial aspects. We take a look in on Australia and their history of managing geospatial data and Singapore for an interesting case about a smart city – and the management of geospatial data that is hard to get as it involves areas that are not easily accessible from the street. Digging into the huge amount of geospatial data that nowadays involves city architectures, Niall Conway reflects on the new profile of a city planner. What are the skills they should have... or acquire? It again shows that geospatial data is everywhere!

Joost Boers, content manager

With all of the talk within the geospatial industry now turning to the topic of earth observation, it makes sense that the Copernicus Programme seems to be the real flavour of the moment. Directed by the European Commission in partnership with the European Space Agency (ESA), this single earth observation programme, the world's largest of its kind, is now well and truly operational. The 6.7 billion euros programme consists of numerous satellites (called 'Sentinels') capturing real-time information about the world for the purpose of achieving better decision-making, increased innovation, and better climate preparedness. The freely available online Copernicus data will allow geospatialists in particular to explore massive new opportunities.

Niall Conway, contributing editor

UAVs have come a very long way in a very short period of time. They have progressed from the novelty toy gift under the Christmas tree, to small, low-cost, smart platforms carrying an array of miniaturised sensors to gather thermal data, multispectral and NDVI imagery, and Lidar for many applications. Reaching their current potential has recently been aided by improved battery life, autonomous flight capability, object avoidance technology, waterproof drones capable of take-off and landing on water, and commercial aerial survey solutions using improved horizontal and vertical positioning systems such as RTK GPS and PPK at more affordable prices. What will really release the vast future commercial potential of this exciting technology from its current constraints though is the need to develop a robust infrastructure for safe drone operation; including proper legislation, standards, beyond line-of-site operation, and a secure air traffic management system.

David R. Green, contributing author

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