

Bluesky Uses Leica CityMapper to Capture UK Cities in 3D



Bluesky International Ltd has announced that it has used the Leica CityMapper, the world's first hybrid airborne sensor combining vertical and oblique imagery together with 3D laser scanning, to capture major cities throughout the UK.

Using the CityMapper, Bluesky was able to capture parts of London, Manchester and Birmingham as well as Brighton, Bristol, Cambridge, Norwich, Nottingham and Oxford. Bluesky intends to increase its coverage by capturing additional towns and cities across the UK and Ireland in 2019.

It is the first time this technology has been used commercially in the UK to this level. The captured city data is currently available from Bluesky and Leica Geosystems in its

constituent components of vertical orthorectified aerial imagery, oblique photographs and LiDAR point cloud data. Plans are in place to also include the imagery in the HxGN Content Program.

"The combination of multiple survey grade cameras and LiDAR enables the simultaneous capture of data for the automatic creation of highly accurate and detailed citywide 3D models, with one sensor," said Rachel Tidmarsh, Bluesky Managing Director. "Whilst 3D models have been around for years, they have either been prohibitively expensive for use across larger areas or of insufficient detail or accuracy. Using the CityMapper sensor, we can achieve efficient, and therefore cost-effective, capture of highly detailed and accurate data making widespread use of 3D models a reality."

CityMapper includes a traditional vertical camera as well as survey-grade oblique cameras. Specially designed for 3D city modelling and urban mapping, the sensor also includes high-performance LiDAR technology to accurately collect elevation data even into the shadows, which are common in urban environments and make photo-based data collection difficult. The CityMapper sensor also collects colour infrared data, which can be used to aid greenspace mapping and vegetation studies.

Applications of the Bluesky 3D models are expected to include urban planning, line of sight analysis, new development visualisations, environmental modelling as well as potentially 3D fly-throughs and virtual reality experiences. Early adopters of the data include architects, planning consultants and other map publishers.

"The CityMapper was designed for just this type of use – capturing the many layers of urban environments," said Ron Roth, Geosystems' Geospatial Content Solutions product manager of Airborne Topographic LiDAR.

For more information about Bluesky, visit www.bluesky-world.com/

For more information about the Leica CityMapper, visit www.bluesky-world.com/citymapper