

Lidar enters the fast lane

Sensors

Yellowscan has used the latest Lidar sensors from Velodyne to create precise mapping data for an infrastructure construction project on one of central Europe's busiest roadways (write Nick Flaherty).

The project was conducted by Ventus-Tech using the YellowScan Surveyor UAV carrying Velodyne's Puck sensor to collect data along a 47 km segment of the M1 highway in north-western Hungary. The data, gathered by 88 UAV flights over one month, enabled engineers to design a plan to expand the highway from 2 + 2 lanes to 3 + 3.

The UAV provided 100 data points per square metre with an accuracy of 5 cm. This level of precise detail is



Yellowscan has used a Lidar laser sensor on a UAV to cut the survey time for a key highway development in Hungary (Courtesy Velodyne Lidar)

especially important when redesigning roadways, as widening a road requires consideration of existing infrastructure, drainage networks and vegetation.

The project is in the design, planning and approval stage, with final design expected to be approved by this summer and construction to be finished by 2022.