

How Orthophoto UAS Compete with Traditional Surveying



One of the elements that makes Intergeo particularly dynamic is the so-called Trend and Media Forum. The Forum, based on the exhibition floor, functions as a platform for companies, giving them the opportunity to present their products. It is an excellent spot to get in touch with companies'™ latest developments and innovations.

The kick-off was made on Wednesday by Marco Möller of MAVinci, Germany (image), who enthusiastically gave a practical showcase on how the MAVinci Sirius UAS compete with traditional surveying methods. The 2011 edition of Intergeo had already provided a clear indication of the increasing role of unmanned aerial systems, but this year many more companies, both directly or indirectly related to UAS, are showcasing at Intergeo.

What makes UAS an interesting platform to use for surveying is the fact they are low-weight, easily transportable and affordable. Thanks to their user-friendliness and reliability, today's low-weight UAS offer a cost-efficient method of collecting 3D data. Marco Möller presented additional advantages of UAS as compared to manned airplanes or surveying teams with a total station, such as the possibility of checking the data in the field within a couple of minutes, the high accuracy with regard to area or volume measurement and the possibility of capturing image reference.

The Sirius UAS of MAVinci are suitable for the acquisition of aerial images, orthophotos and 3D Models, and provide some interesting benefits like simple automatic flight planning, automatic operation from takeoff to landing and autopilot assisted manual control. In addition, they are fully operational up to 50-65km/h wind. With similar products from other manufacturers present at Intergeo claiming their UAS is suitable for professional surveying purposes, it would appear that there is a bright future ahead for UAS. This certainly applies to the low-end user, but most likely also to high-end users.

It is true that not every geomatics professional is raving about the phenomenon of UAS. Some people have doubts about its sensitiveness to crosswinds and turbulence, or think the high level of skill and degree of inventiveness required to use them effectively is being underestimated. However, the tendency of surveyors to regard UAS as being inferior to traditional surveying methods seems to be a thing of the past.