



QUESTIONS AND ANSWERS WITH TRIMBLE

BY MAURICIO JAIMES, TRIMBLE. WWW.TRIMBLE.COM

Q: What has been the single most important technological advance in recent years that has enabled wireless/mobile working to become a viable option?

A: Developments extending battery life and increasing ruggedness have been key factors in the growth of mobile working. To work mobile a convergence of multiple technologies is required—integrated GPS, Bluetooth, WLAN, HSDPA, etc. These technological advances have enabled field workers to have the right tool for the job and, more importantly, all the functions needed day to day on one device. However I feel that, all these developments would be useless unless battery life and ruggedness is present, allowing workers to bring these new technologies into the field with the confidence that they can work all day and that the hardware can stand up to the environment in which they need to work.

Q: How do you see the technology developing in the near future?

A: With the deployment of Virtual Reference Networks (VRS™) real-time corrections services throughout Europe, 10 cm accuracy can be achieved virtually anywhere, with easy set up and a high accuracy GPS handheld. New networks are being deployed all the time, so in

the near future I think that most people will have access to these high levels of accuracy in the field.

With current levels of technology, yield is still at less than 100% but it is improving all the time. For example, recent key enhancements to the Trimble suite of software have resulted in improved productivity through higher position yield—the proportion of quality GNSS positions that can be recorded in a given environment—both before and after postprocessing of the order of 20% and higher. I suspect that the technology will continue to evolve towards better yield, with same level of accuracy, which will mean efficiency increases considerably as users get higher levels of accuracy everywhere.

Q: Where do you see the greatest take up of this technology

A: Wireless technology has enabled mobile users to access the maps they have in their GIS by using a GIS server. This capability has huge benefits for organizations in terms of efficiency and response. Mobile workers today have access to mobile GIS that enables them to update or modify the location and attributes of assets in the field and update their centralized GIS in real time. Wireless communications in combination with integrated GPS in a handheld form factor have made that possible. There are clear advantages to georeferencing all assets, and I think more and more people are realizing that. Knowing where an asset is, and the condition it is in, will give mobile workers the power to manage assets more effectively and ultimately improve their productivity. For example, many utility companies need to monitor assets over time (electric sub-stations that need to be kept clean, free of overhanging trees, in working order etc). An electric utility company in the UK is using Trimble Nomad® G series handhelds to do this type of monitoring, georeferencing and taking a picture of the assets, as well as scanning a bar code to document that they did the work to fulfil process and regulation requirements. Such work practices will I feel become even more prevalent. The pressure is on private companies and government organisations to increase their efficiency and ROI, so the "capture once - use many" philosophy for geospatial data is, in my opinion, a must for any company that has

geographically dispersed assets, and more companies are realizing this all the time.

Q: What is the situation in Europe and are any exciting trends developing that differ from what's happening in the UK

A: EU directives have been driving the use of GPS and wireless technology throughout Europe by increasing the number of mobile workers throughout the region and changing the way in which they work. The Joint Research Centre (JRC) has been actively working on developing standards and procedures for the proper use of GPS technology. For example, today TÜV certification for GPS handhelds can be attained (and has been by a number of Trimble Mapping & GIS receivers) to test and certify that the technology will meet required standards for the mapping of land parcels for agricultural subsidy control.

I think the JRC has done exemplary work by looking into required procedures and accuracies so that mobile workers receive guidance on what equipment and technology is best suited to their work. The increasing availability of consumer level PDAs and smart phones with GPS has been a distraction for many users because of their low cost, but have proven to be less optimum solutions for many mobile worker requirements. Now, the JRC is providing direction on what solutions will best meet the EU requirements.

Q: How can you see this technology working for large infrastructure projects such as the 2012 London Olympics

A: The importance of geospatial data for the planning and execution of a large infrastructure project such as the Olympics should not be underestimated. As an example, detailed knowledge of installed assets such as street lighting and temporary pedestrian signs is critical for good crowd control. To keep a crowd secure, manhole covers will be sealed and roads will be closed, so having an accurate and complete database of those assets is critical. Likewise an accurate database of assets will be important for creating and managing licensed areas for street vendors. Given the massive scale of events like the 2012 Olympics, I see that there will be many opportunities for mobile applications integrating GPS and wireless technology.

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LOGISTICS & LATEST TECHNOLOGY

23. CONNECTING YOUR
WORKFORCE AND ASSETS –
KOREC

URBAN SUSTAINABILITY

26. SUSTAINABLE "MASTER"
PLANNING – King Sturge

SIMULATION AND PLANNING

28. ARE TOUGH TIMES THE RIGHT
TIME FOR INVESTMENT? –
Autodesk

NETWORK WITH THE INDUSTRY

30. A UK USER CONFERENCE VIEW
– Intergraph

31. DATA SHARING THE KEY TO
START WORKING TOGETHER –
Dotted Eyes