

## Abstract

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Session 3: Developing an Effective Global Geodetic Reference Framework and Supporting Location Based Services

### **The uses, trends, technology and economic benefits of a global reference framework**

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GNSS capability is becoming ubiquitous in a wide variety of electronic devices such as cell phones, PDAs, and many others. As GNSS chipsets and subsystems become smaller, faster and less expensive, GNSS technology will be integrated with RFID, inertial and other technologies to bring location information to even more applications. The trend continues to use GNSS and other positioning technologies to automate systems such as heavy machinery in construction, mining and agriculture. More and more workers and assets are on the move. The combination of wireless handheld computing systems with GNSS based tracking is an emerging trend in the mobile workplace. Mobile resource management is revolutionizing the transportation industry by improving delivery times, vehicle utilization and worker safety and productivity. Developing markets are creating significant demand for positioning technology. As these countries invest in infrastructure projects such as roads, bridges and telecommunications infrastructure, they are demanding high accuracy positioning information. High accuracy positioning systems require not just sophisticated hardware but also integrated software, and seamless support and service in order to deliver a complete positioning solution. Economic benefits include increased safety for workers as well as increased productivity due to improved uptime, accuracy, reduced input and increased yield. This presentation will discuss the necessity of a Global Geodetic Reference Framework, connected for the uses of GNSS worldwide.