VRS Powered by BeiDou and Galileo

Rana Charara (France)

Key words: Cadastre; Cartography; Engineering survey; GNSS/GPS; Land management; Positioning; Reference systems;

SUMMARY

In recent years, a number of new satellite systems were introduced and are now available for processing. GPS and GLONASS went through a number of modernizations, one single QZSS satellite is available in certain areas of the world, BeiDou is deployed with a reasonable number of satellites and Galileo is on the horizon to become the next player. All the satellite systems are ready to be used for field positioning. The number of visible satellites will nearly double from the area of 20 to the area of 40 in the coming years. This presentation will demonstrate how the network back-end is adapted to support all satellites in view. We will show new technology used in the processing center in terms of load distribution and memory consumption. We will also present the Trimble Pivot Platform software that provides a number of new modules. The software can be configured to run a VRS system to prove the field performance utilizing all available satellite systems.