



The Business and Technology of
Global Navigation and Positioning



What's Going to Happen When High Precision GPS is Inexpensive?

Speaker: Eric Gakstatter

*Contributing Editor – GPS World
Editor - Geospatial Solutions*

Presented at: FIG 2011
Marrakech, Morocco
May 19, 2011

©Copyright 2011

ERIC GAKSTATTER
PRESENTATION

brought to you by



What Will Happen When High-Precision GPS Receivers Are Inexpensive?

1. GNSS technology in the next 10 years is going to advance significantly faster than the past 10 years.
2. Trends.

©Copyright 2011

ERIC GAKSTATTER
PRESENTATION

brought to you by



GPS/GNSS Technology

GNSS technology in the next 10 years is going to advance significantly faster than the past 10 years.

©Copyright 2011

ERIC GAKSTATTER
PRESENTATION

brought to you by

GPS World Geospatial
solutions

GNSS Technology is Rapidly Changing

- May 2010 marked a new era of GPS with the launch of the first GPS satellite equipped to broadcast L5.
- According to the USAF, a full constellation of 24 GPS satellites broadcasting L5 (and all legacy signals) will be in orbit in 2019.
- Europe's Galileo could accelerate a full L5 constellation as soon as 2015.

©Copyright 2011

ERIC GAKSTATTER
PRESENTATION

brought to you by

GPS World Geospatial
solutions

What Will Happen When High-Precision GPS Receivers Are Inexpensive?

- The new GPS L5 signal will result in very low-cost L1/L5 receivers capable of cm-level horizontal/vertical precision.
- High-precision GPS receivers will be available to everyone at a very low cost.
- The value of high-precision data (horizontal and vertical) will reduce substantially.
- Crowd-sourced data will be a major factor.

©Copyright 2011

ERIC GAKSTATTER
PRESENTATION

brought to you by

GPS World Geospatial
solutions

Trends

- Trending from measurement skills to data management and analysis skills.
- Trending from relying solely on your own data to incorporating data from external sources (eg. using crowd-sourcing data).
- A surveying firm built around the concept of locating points is headed for an economic storm.

©Copyright 2011

ERIC GAKSTATTER
PRESENTATION

brought to you by

GPS World Geospatial
solutions



The Business and Technology of
Global Navigation and Positioning



Eric Gakstatter
Contact Information:
egakstatter@questex.com

Subscribe to Survey Scene and Geospatial Weekly
Newsletters at www.gpsworld.com/newsletters

Subscribe to *GPS World* Magazine at
www.gpsworld.com/subscribemag

©Copyright 2010

ERIC GAKSTATTER
PRESENTATION

brought to you by

