

ENABLING THE FUTURE OF COMMUNICATIONS



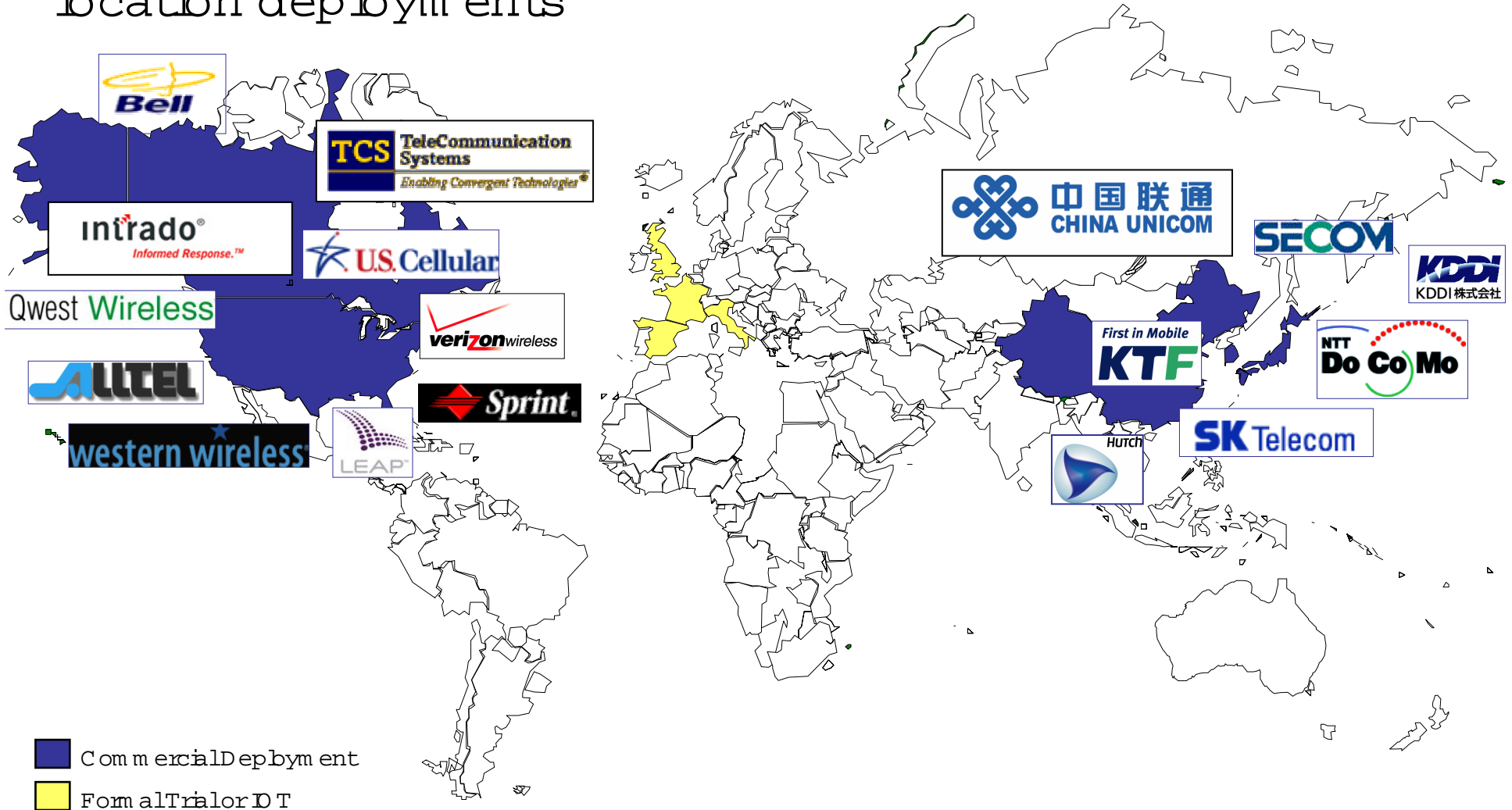
The Future of LBS

Wireless Communications Alliance
May 18, 2004

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QUALCOMM

QUALCOMM AGPS Technology is Deployed Commercially at 17 Operators Worldwide: ~85% market share precision location deployments

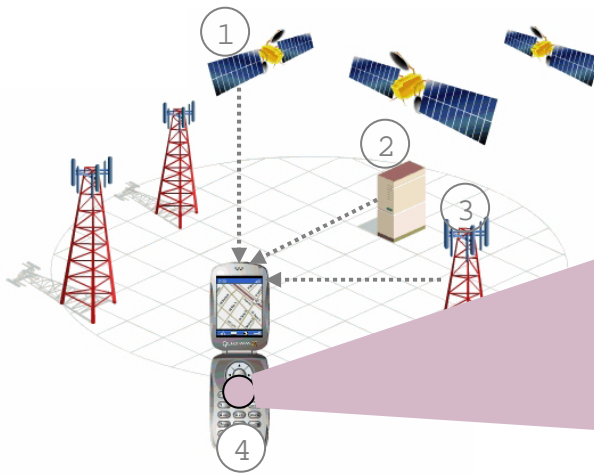


GPS One Technology is Commercially Proven for Wireless Use in 70+ Handset Models; 25+ Million handsets in service

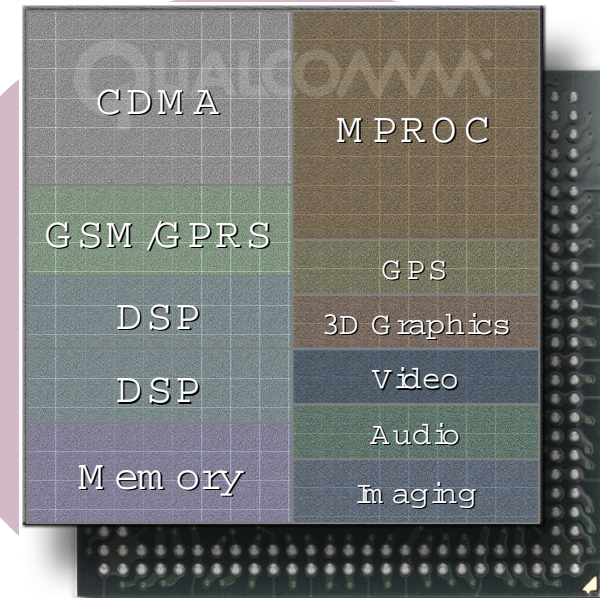


Samsung, Sony-Ericsson, Motorola, Panasonic, LG, Toshiba, Sanyo, Hitachi, Casio, Kyocera, Audiovox, DENSO, Yiso, Others

gpsOne technology is AGPS-based, integrated into all mid- and high-end MSMs



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gpsOne combines information from multiple sources to provide fast, accurate, location

1. The GPS constellation
2. "Assistance data" from a Server
3. Location related network information
4. Hybrid AGPS chipset technology

- Highly integrated into MSMs, so it's the lowest cost solution
- Meets Operator and Subscriber needs
- Handset vendors get GPS inside the MSM chipset, without extra parts.

LBS Applications Open Up Worlds of Possibilities

- Mobile Games
 - Treasure-hunt games
 - "Shoot 'em up" multiplayer games



- Navigation
 - Points of interest
 - Friend Finders
 - Find a date



- Enterprise
 - Mobile workforce
 - "Mute" devices

The E911 Mandate

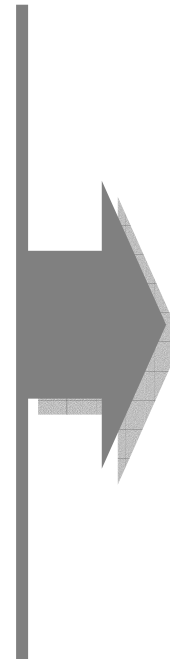
North American Carriers using gpsOne to help meet the FCC Mandate

gpsOne and QPoint are the de facto E911 solution for US CDMA Operators

E911 provides the basis for North American expansion of LBS



Qwest Wireless



Points of Interest	Peer to Peer
Personal Security	Commerce
Gaming	E911 Services

Example only. Does not imply business plans

Looking Ahead...

- Economics

- Increasingly, operators MUST have LBS, because competition has it.
- LBS is synergistic with other offerings – find winning combinations.
- LBS applications market that fosters “home runs” as well as base hits.
- Pricing policies, revenue capture & sharing across LBS value chain.

- Technology

- Drive performance metrics: availability, accuracy, latency, at a given cost
 - Evolutionary: incremental improvements in sensitivity, processing
 - Revolutionary: Complementary technologies (DTV, WiFi, ...)
- Integrate LBS with broader wireless technology developments
 - Device technologies (cost vs features); Infrastructure (high-speed data); Service creation and deployment efficiencies (e.g., BREW and related download architectures); Standards (IP-based vs signalling-based)

- Government

- Government will continue to mandate LBS for Emergency Services
- Privacy and commercial use concepts differ by global region
- Policy-making in regards to new technologies and devices (VoIP)

A large, bold, black Qualcomm logo is centered on the page. The "Q" is significantly larger than the other letters and has a distinctive notch at the top. The word "QUALCOMM" is written in a clean, sans-serif font, with a registered trademark symbol (®) at the end.