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Standards and Real-World LBS Requirements

Ben Rodilitz - NorBelle

Opportunistic RF Localization for
Next Generation Wireless Devices
Worcester Polytechnic Institute
June, 2008

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Topics:

- What Is Required

- What We've Got

- Relevance of Standards to LBS

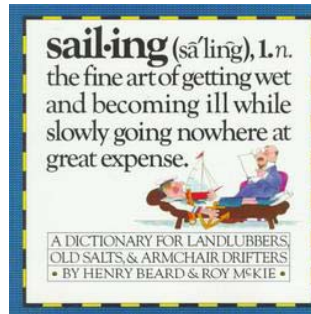- What Can We Do?

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What Is Required

- Users Expectations: The Quattro Effect
  - Pervasive
  - Accurate
  - Timely
  - Predictable
  - Minimal Ancillary Disbenefits

The Standards Process should be an enabler of these expectations by facilitating information distribution and providing target performance metrics

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What We've Got:

Standards: The fine art of getting frustrated and falling
behind while slowly meeting everywhere at great expense.

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The issues:
- Lack of Overview
  - Velocity
  - "16 seconds"
  - Measurements of Opportunity
  - Device-based Operation
- Fragmentation
  - 3GPP, 3GPP2, OMA, OGC, JAVA, Bluetooth…
  - RRLP, RRC, IS801, SUPL*, OpenLS, GML, JSR 179/293, Bluetooth LPP
- Too Conservative ("Another positioning method?")
- Too pedantic (position→velocity→hybrid(s))

Relevance:

Fred C. Dobbs/Gold Hat Effect

Impetus for Non-Standard Solutions:
- Improved Innovation
  - Avoid Lowest Common Denominator
  - Availability of Improvements (Bandwidth, TTFF)
  - Availability of New Positioning Techniques
- Improved Time to Market
- Level Playing Field

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What We Can Do:
- Highlight areas needing attention
    - Measurements of Opportunity
        - Data Interchange
        - Integration
    - Device-Based solutions

- Provide a holistic context to the creation and consumption of location
    - Define what is required to enable LBS
        - Aiding
        - Measurements
        - Reporting
        - Display
        - …
    - Lead the standards processes toward understanding integrated requirements for providing Location Based Services

Standard processes that meet the tests of robustness and timeliness will benefit the location community and its customers.

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Thank You