

An Operator's Perspective

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Base Document:

Purpose:

For information and discussion

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&

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Question



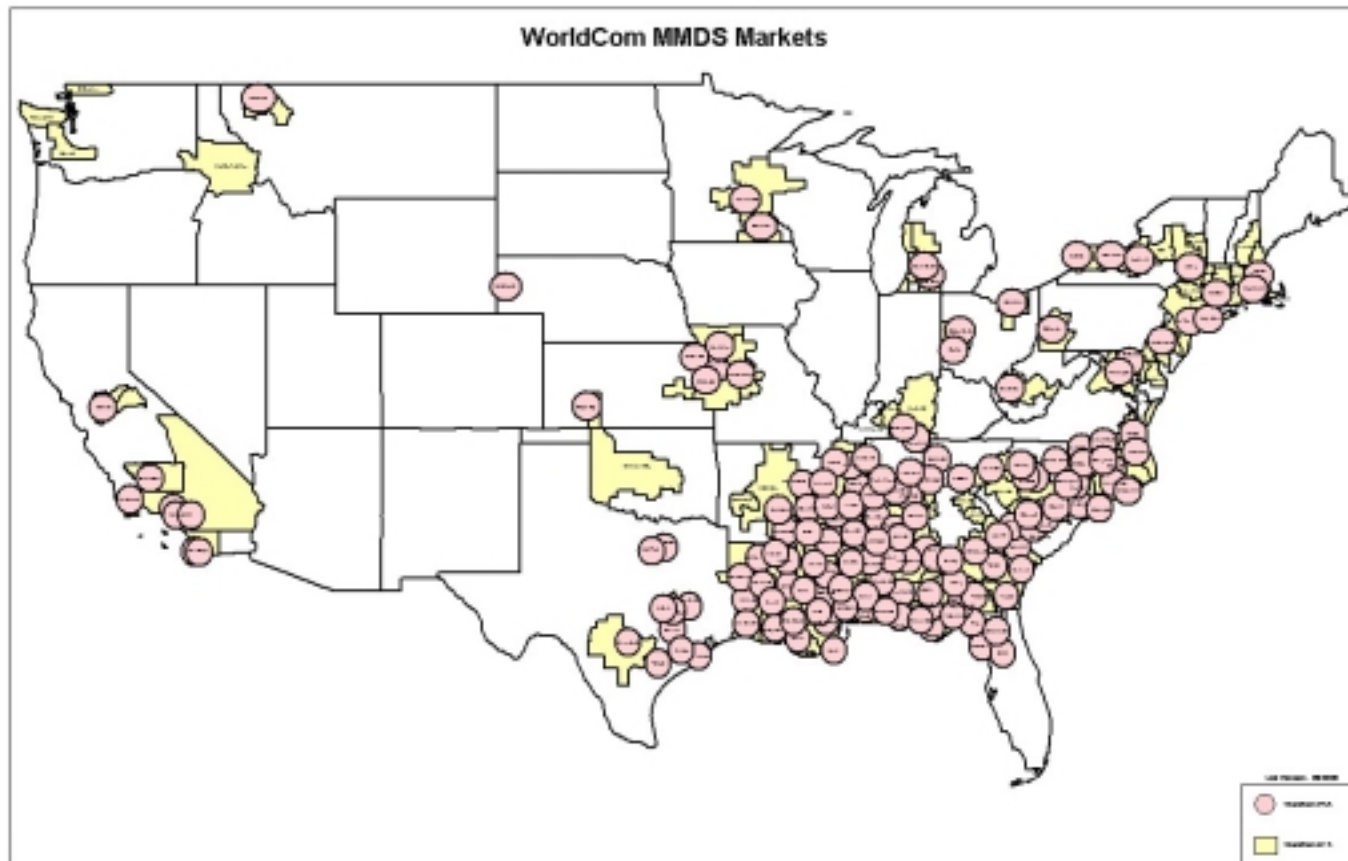
Engineering Committee



Should we have
a standard for
wireless
broadband?



WorldCom Markets



WorldCom Major Markets

New York City
Los Angeles
Philadelphia
Dallas
Boston
Washington
Minneapolis
Cleveland
Pittsburgh
Baltimore
Indianapolis
Long Island
San Diego
Charlotte
Dayton
Kansas City
Norfolk - Virginia Beach
San Antonio
Greensboro
Providence

Background

- Due diligence – last year
- Trials – last quarter
- Initial deployment – this quarter
- 1Standard (<http://www.wcai.com/>) -January
- On-going deployments – 1H2001
- Desired near term multi-vendor community
 - 2H2001 is the target

Requirements

- Scope
 - Timing (commercial 2G products this year!)
 - Cost (CPE: total modem, T/R, antenna)
 - Market (domestic)
 - Bands (MMDS, MDS, WCS)
- 2G must be a significant improvement over 1G
 - Improvements in performance from our trials
 - Multi-vendor interoperability

Requirements

- QoS (three circuit speeds, three quality levels)
- NLOS, deep coverage
- Multi-vendor inter-operability
- Outdoor required, indoor optional
- Professional evolving to customer installation
- OFDM, but switch-able PHY types ok if each is optimized (but not compromised)
- DOCSIS-like, IP Centric MAC
- Supercells with long range & deep coverage (NLOS)
- FDD (TDD Optional)

Recommendations

- Select one standard that optimizes against requirements presented here.
- To get going, select two PHY ‘types’ that are ‘switch-able’ with one MAC – Let’s GO.
- Decide generally on each type(s), but leave flexibility to converge each type over the next session(s). Allows optimal OFDM convergence.
- If you plan to be in the “circle of champions” (standardized and interoperable), let WorldCom (and the other service providers) know soon, we need to buy it!

Questions or Feedback?

- For the 1Standard / WCA Engineering Committee
- Or for WorldCom

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THANK YOU