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14 June 2007

VIA ELECTRONIC FILING

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

Re: Former Nextel Communications, Inc. Upper 700 MHz Guard Band Licenses and Revisions to Part 27 of the Commission's Rules, WT Docket No. 06-169; The Development of Operational Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Communication Requirements Through the Year 2010, WT Docket No. 96-86.

Dear Ms. Dortch:

On 13 June 2007, Andrew Smith, LGS, Dr. Tewfik Doumi, Bell Labs, and the undersigned, on behalf of Alcatel-Lucent, participated in a meeting with Dana Shaffer, Deputy Chief of the Public Safety and Homeland Security Bureau. The purpose of the meeting was to discuss, reiterate and affirm Lucent's position in the above referenced proceedings.

Alcatel-Lucent continues to support the need for a broadband-only 6 MHz broadband block in the 700 MHz public safety spectrum space. In addition, Alcatel-Lucent supports consolidation of the narrowband spectrum to the upper end of the public safety 700 MHz block. Alcatel-Lucent reaffirmed its belief that broadband is more cost-effective than wideband. Finally, if wideband is supported for rural coverage, the possibility of reusing as secondary operation the public safety's internal guard band or the public safety narrowband block should be explored. Further substance of the discussion is set forth in the attached handout.

In accordance with Section 1.1206(b)(2) of the Commission's rules, this letter is being filed electronically with your office. Please contact the undersigned with any questions in connection with this filing.

Respectfully submitted,



Michael T. McMenamin

cc: Dana Shaffer



Public Safety 700 MHz Recommendations

June, 2007

Alcatel-Lucent Position

Alcatel-Lucent supports consolidation of narrowband spectrum to upper end of the public safety 700 MHz block

Alcatel-Lucent continues to support **Broadband-only 2x6 MHz** block in the Public Safety 700 MHz band

- If wideband is desired for rural areas, it should be placed in public safety's internal guard band or in the public safety narrowband block

Alcatel-Lucent believes that misperception about Broadband characteristics and economics is one major factor behind public safety's push for wideband adoption

Alcatel-Lucent Position

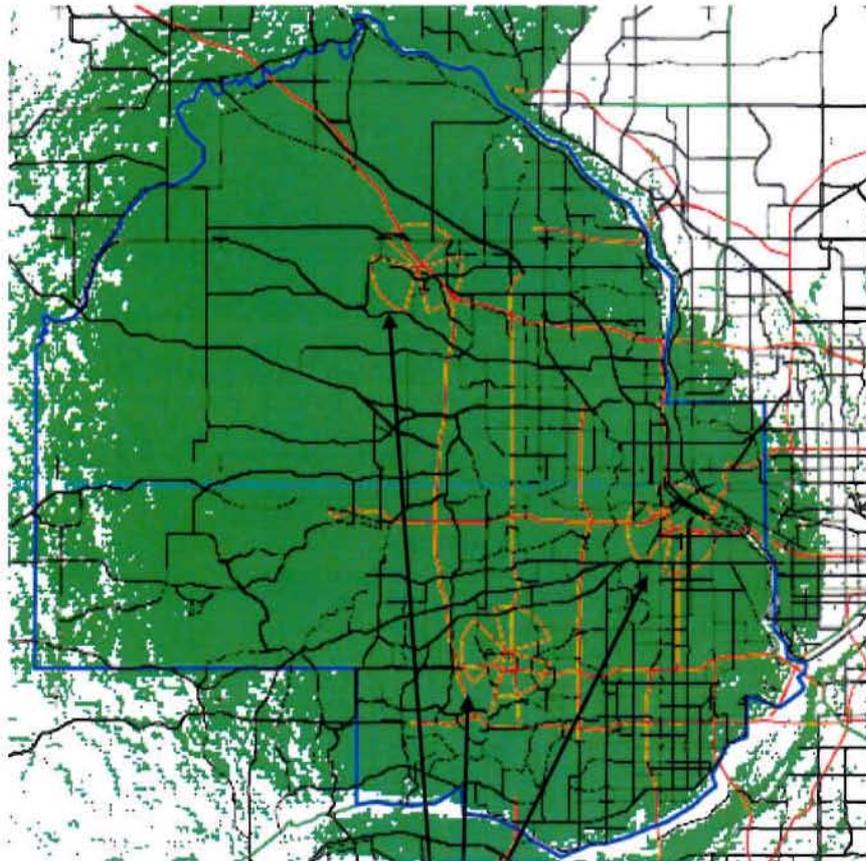
At comparable edge data rates, broadband provides comparable or greater coverage at significantly higher capacity than wideband

- Alcatel-Lucent RF coverage analysis shows that Hennepin County, MN alone can be covered with as many cell sites as wideband but a higher data rate*

The Metropolitan Emergency Services Board's FNPRM Reply Comments indicate that on a site basis typical wideband equipment is more expensive than broadband equipment

* This is in dramatic contrast to Macro Corporation's RF assessment, referenced by the Metropolitan Emergency Service Board (MESB) in their FNPRM reply comments. Macro's analysis suggested broadband requires 6x the number of sites to cover Hennepin County compared to wideband.

Broadband Coverage Snapshot - Hennepin County Only



3-sector cells with 16 dBi antenna
Mix of Urban, Suburban and Rural

* These are achievable effective data rates at the edge of the cells under mobile conditions. Higher rates possible within the cell

EV-DO Rev.A Technology Example

- 20 W Base Stations
- 300 mW (EIRP) Terminals

Balanced Edge Coverage Contour

- >256 Kbps Outbound Link*
- ~256 Kbps Inbound Link*

>96% of the Hennepin County can be covered with 3 broadband sites but at higher data rates and higher capacity than wideband

Cost-effectiveness of Broadband vs. Wideband

Macro Corporation's analysis cited in the Metropolitan Emergency Services Board's FNPRM Reply Comments:

Comparison of coverage and initial network costs for "high site" 700 MHz wideband vs. broadband systems in Hennepin County, Minnesota³.

Hennepin County, Minnesota 611 Square Miles	IBM Broadband	Motorola Wideband
Number of Antenna Sites Required	18	3
Percentage of County Covered	90.6	95.9
Square Miles Covered Per Site	31	195
Infrastructure Cost Per Square Mile*	\$15,496	\$5,773
* RF & Switch Costs Only - Backhaul Costs are Excluded	\$504K per Site	\$1.13M per Site

Alcatel-Lucent's coverage analysis shows that 3 broadband sites represent the minimal number to cover the 611 square-miles of Hennepin County

Fewer than 18 can cover all 9 counties listed in Hennepin waiver request, including Hennepin County, using coverage requirements in the November 2004 Metropolitan Radio Board's Request For Proposal, while achieving substantially higher data rates than possible with wideband

of Wideband Base Station Radios?
Wideband User Device Cost?
Wideband Data Carrying Capacity?
Wideband Data Rates?

A Few Wideband Myths

Wideband has a Longer Radio Range

- For every known mobile wireless technology the achievable radio cell range is at least a function of the planned data rate at the edge of the cell footprint
- Range comparisons must be done at a common data rate

Wideband is Appropriate for Low-traffic Rural Areas

- Disasters can occur anywhere and a few wideband channels may not provide the capacity needed

Wideband Offers Flexibility to State and Local

- Flexibility has led to spectrum fragmentation and eventually to lack of interoperability
- Broadband features allow for local control with shared spectrum and infrastructure

Wideband Equipment is More Cost-effective

- FNPRM Reply Comments from the Metropolitan Emergency Services Board indicate it is not

Hennepin County - Terrain Map

