



**Sprint Nextel**  
2001 Edmund Halley Drive  
Reston, VA 20191  
Office: (703) 433-8525 Fax: (703) 433-4142  
Mobile: (703) 926-5933

February 1, 2008

Written *Ex Parte* Communication

Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street, S.W. Room TW-A325  
Washington, DC 20554

Re: *Spectrum and Service Rules for Ancillary Terrestrial Components in the 1.6/2.4 GHz Big LEO Bands*, IB Docket No. 07-253

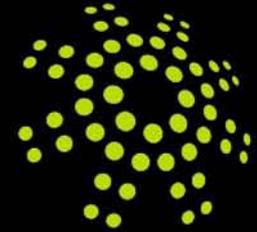
Dear Ms. Dortch:

Paul Sinderbrand on behalf of the Wireless Communications Association, International (WCAI) and Trey Hanbury on behalf of Sprint Nextel Corporation (Sprint Nextel) met yesterday with Aaron Goldberger of the Office of Chairman Kevin J. Martin and Wayne Leighton of the Office of Commissioner Deborah Taylor Tate. The representatives for WCAI and Sprint Nextel also met today with Angela Giancarlo of Office of Commissioner Robert M. McDowell and Bruce L. Gottlieb of the Office of Commissioner Michael Copps. During each meeting, we discussed the attached presentation. If any questions arise concerning this filing, please contact Paul Sinderbrand or me.

Sincerely,

Trey Hanbury, Esq.  
Director, Sprint Nextel Corporation

CC: Aaron Goldberger, Angela Giancarlo, Wayne Leighton, Bruce Gottlieb



XOHM

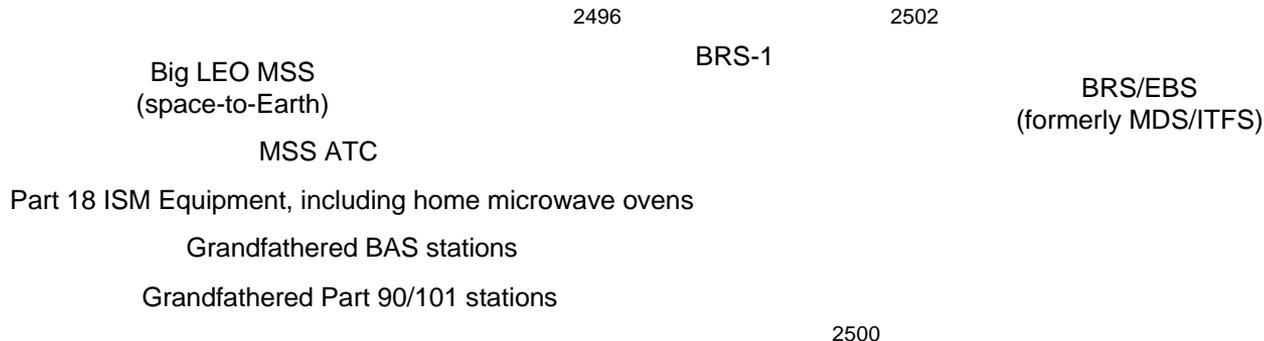
WiMAX from Sprint

# MSS ATC Interference into the Broadband Radio Service

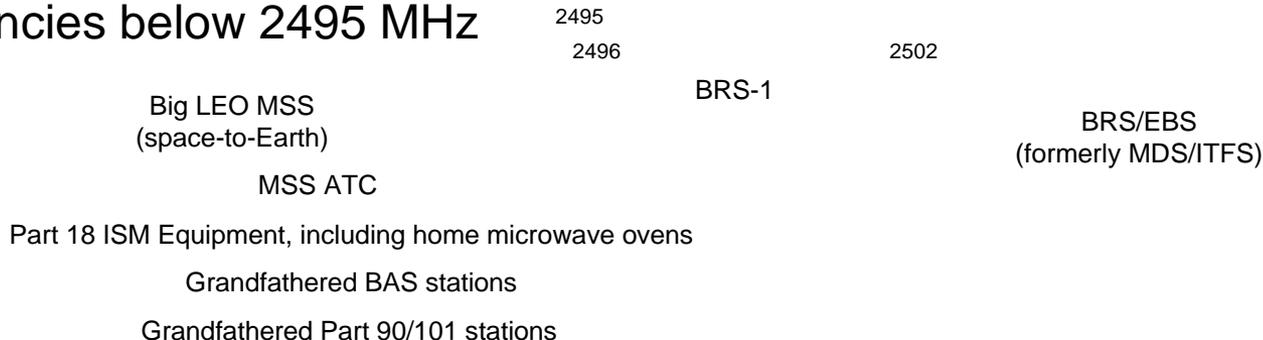
Sprint Nextel Corporation

# MSS ATC Interference into BRS-1

- **June 2006** – Globalstar files Petition for Rulemaking
  - Sought access to deploy ATC throughout the 2483.5-2500 MHz band



- **November 2007** – FCC issues Notice of Proposed Rulemaking seeking comment on Globalstar’s proposal
- **December 2007** – Globalstar concedes it cannot operate on a co-channel basis with BRS-1 “at this time” and, for now, limits its request to “only” frequencies below 2495 MHz

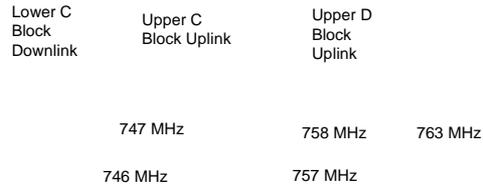




# State of the Art Frequency Separation – 3 MHz

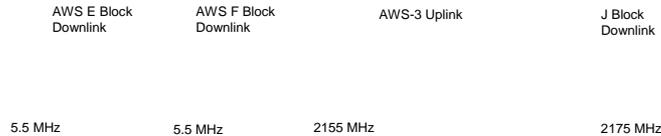
## Upper 700 MHz Uplink/Downlink Separation – 3 MHz Equivalent

Optional Internal Upper C Block  
1 MHz Separation

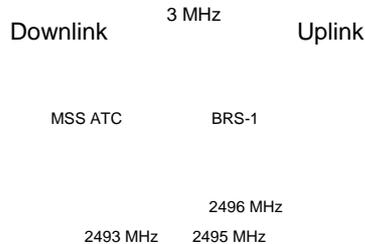


## Proposed AWS-1 Uplink/Downlink Separation – 3 MHz Equivalent

2.5 MHz (AWS-3 Licensee Internalizes Frequency Separations Inside AWS-3 Band)



## BRS-1 Uplink/Downlink Separation – 3 MHz



Once adjusted for frequency, uplink and downlink adjacencies in multiple bands all require at least three megahertz of frequency separation, according to numerous vendors, operators, manufacturers, and trade associations



# Less Stringent OOB Limits Apply to ATC

- BRS emissions limits are more than *twenty-five times* as stringent one megahertz from the band edge and more than *six-thousand four hundred and fifty-six times* as stringent three megahertz from the band edge.
- Unlike the emissions limits that apply to ATC, those that apply to BRS continue to become more stringent as signals move away from the band edge.
- MSS ATC should attenuate its out-of-band emissions to at least  $43 + 10 \log P$  at the ATC band edge and at least  $67 + 10 \log P$  three megahertz from the ATC band edge if a complaint is received involving a BRS base station at least 1.5 kilometers away from the ATC base station.

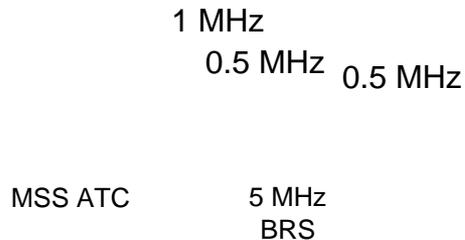
At band edge	-44.1 dBW/30 kHz	<b>-88.9 dBW/Hz</b>	-43 dBW/ 1% of bandwidth (50 kHz, assuming a 5 MHz channel)	<b>-90.0 dBW/Hz</b>
1 megahertz from band edge	-44.1 dBW/30 kHz	<b>-88.9 dBW/Hz</b>	-43 dBW/1 MHz	<b>-103.0 dBW/Hz</b>
3 megahertz from band edge, if complaint and stations at least 1.5 kilometers apart	-44.1 dBW/30 kHz	<b>-88.9 dBW/Hz</b>	-67 dBW/1 MHz	<b>-127.0 dBW/Hz</b>

5. MSS ATC Interference into BRS  
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# BRS Emissions Limits Should Apply to ATC

More Stringent MSS ATC Emissions Limits Only Apply 3 MHz Away



Even assuming the Commission adopts a  $43 + 10 \log P$  emissions limit for MSS ATC, then . . .

6 MHz

the more stringent  $67 + 10 \log P$  1.5 MHz emissions limit would only apply once ATC emissions were well into an assumed five megahertz BRS-1 channel operation, which will not protect BRS-1 licensees against harmful interference

Harmful Interference