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April 2, 2012

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

**RE: *Amendment of Part 27 of the Commission's Rules to Govern the Operation of Wireless Communications Services in the 2.3 GHz Band,* WT Docket No. 07-293; IB Docket No. 95-91; GEN Docket No. 90-357**

Dear Ms. Dortch:

On March 29, representatives of AT&T met with members of the FCC staff at staff's invitation to discuss the issues raised by AT&T in its Petition for Partial Reconsideration filed September 1, 2010 in this docket. Attending the meeting for AT&T were Joan Marsh, Jim Talbot, Brian Benison, David Wolter, Doug Duet, and Michael Goggin. FCC staff members attending were Julius Knapp, Chief, Ron Repasi and Patrick Forster of the Office of Engineering and Technology Rick Kaplan, Chief, Roger Noel, John Lebovitz and Tom Derenge of the Wireless Bureau

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The purpose of the meeting with to discuss the technical merit of the relief requested by AT&T in its Petition. The attached presentation on the key technical challenges for WCS deployment was discussed at the meeting.

Please call me if you have any questions.

Sincerely,

/s/ Brian J. Benison

cc: Rick Kaplan
Julius Knapp
Ron Repasi
Patrick Forster
Roger Noel
John Lebovitz
Tom Derenge

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# WCS Reconsideration Technical Issues

LTE in the WCS Band

March 29, 2012

WT Docket 07-293

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# Key Technical Challenges for WCS Rules

## Unique Limitations on WCS A and B Bands

- Power Spectral Density Limitation
- Duty Cycle Limitation prevents use of FDD
- FDD specific limitations


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# PSD Limitation Must be Removed

- PSD limit of 50 mW per MHz to mobile transmitters will prevent LTE deployment in WCS band
  - No record support for PSD limitation
  - Not necessary to prevent harmful interference
  - Inconsistent with other wireless services and with how mobile networks and services are designed
    - Mobile devices do not have the capability to adjust power proportionately with occupied bandwidth
  - Cell density must be increased by a factor of four
    - This would make WCS LTE service economically non-viable


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# LTE Duty Cycles Must be Increased

**Reduced uplink throughput entailed by the new duty-cycle limits will hamper broadband deployment and threaten the viability of FDD**

LTE mobile transmitters produce 2-2.5 dB less peak power

- TDD limit should be raised to at least 43.333%
  - Using LTE and ATPC, there will be no harmful interference at 43.333%
- FDD should not be limited because the transmission is distributed over the frame reducing the potential for interference


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# FDD Specific Limitations Must be Removed

**FDD specific rules discourage use of FDD in the WCS band**

- Base station and handset band assignments for FDD limit ability to pair WCS with other spectrum
- TDD operators are permitted to operate downlink and uplink in both the upper and lower blocks
- FDD operators should be allowed to use either or both pairs for supplemental downlink via carrier aggregation.


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