

December 6, 2011

VIA ELECTRONIC DELIVERY

Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street, SW
Room TWA325
Washington, DC 20554

**Re: Notice of *Ex Parte* Presentation
WT Docket No. 11-18; RM-11592**

Dear Ms. Dortch:

On December 2, 2011, Vulcan Wireless LLC (“Vulcan”) representatives Scott Wills, Paul Nagle, Paul Kolodzy, and Michele Farquhar met with Commissioner McDowell and Angela Giancarlo, his Chief of Staff and Senior Legal Advisor, to discuss the critical need for a condition on the AT&T-Qualcomm acquisition that would help restore a consolidated Lower 700 MHz band class.

During the meeting, the Vulcan representatives discussed the concerns that are dramatically impeding A Block broadband deployment (as described in the attached presentation distributed at the meeting). They discussed a key condition that the Commission must impose before allowing the transfer of Qualcomm’s 700 MHz spectrum to AT&T, or the transaction will further subvert FCC policy, decrease market competitiveness, and further delay the deployment of 4G networks.

They also discussed the following points:

- The Commission should only impose a single condition that restores the original Lower 700 MHz band plan, which would reconsolidate and unify the paired spectrum in the Lower 700 MHz band (*i.e.*, the A, B, and C Blocks);
- The Commission should promptly grant the transfer with this condition, as a reunified band will speed network deployment. Conversely, failure to address the fragmentation of the Lower 700 MHz band now will cause additional delay in network deployments and discourage participation by smaller operators in future spectrum auctions, thereby reducing the value of spectrum, discouraging competition, and subsequently driving up costs to consumers; and
- The Commission should provide AT&T with a sufficient amount time to comply with the condition by affording AT&T up to two years to fully comply with any such condition and ensure that all of its 700 MHz mobile handsets operate on the unified Lower 700 MHz band plan.

The representatives also discussed the results of a “real world” study, funded by a consortium of several Lower 700 MHz A Block licensees,¹ intended to prove or disprove the unsubstantiated claims previously submitted to the FCC and 3GPP by AT&T and Qualcomm, among others, regarding the need for establishing two separate band classes to govern only three spectrum blocks. As described in more detail in the attached presentation and in Vulcan’s November 25 *ex parte* in this proceeding, the findings of the study were as follows:

- The underlying assumptions and claims put forth in 3GPP proceedings rationalizing a separate Band Class 17 were incorrect or overstated;
- Different operators’ systems in the Lower 700 MHz B and C Blocks actually pose a threat of interference to each other that is greater than any threat that would be introduced from a unified Lower 700 MHz band class that includes the A Block;
- Neither the high power E Block transmissions nor Channel 51 transmissions present an interference threat to AT&T’s LTE devices, which currently receive and manage signal level disparities from within the B and C Blocks that are greater than those which would need to be accounted for by restoring the original Lower 700 MHz band plan;
- Concerns about reverse intermodulation distortion interference are unfounded, as commercially deployed AT&T devices did not experience any such interference; and
- The vague and exaggerated concerns regarding the potential increase in cost and/or size of devices necessary to operate on a reunified Lower 700 MHz band plan are without merit, as the cost of devices with such a condition will be virtually unchanged.

Finally, Vulcan explained how the proposed transaction has already negatively impacted other Lower 700 MHz spectrum. Within the last two weeks, a leading AT&T 4G network vendor submitted a proposal to the 3GPP (seemingly endorsed by AT&T) to have other non-AT&T 700 MHz spectrum holders reduce the amount of their usable bandwidth to compensate for AT&T’s anticipated use of the D Block. This proposal was not revealed to the FCC in any filings by AT&T, Qualcomm, or any vendors supporting this proposed transaction. Designed solely to accommodate AT&T’s use of the D Block spectrum, this proposal would force non-AT&T spectrum holders to forfeit their valuable spectrum rather than require AT&T to bear the full responsibility of setting aside its own guard band to accommodate its operations on the D Block.

¹ The consortium members include: Vulcan Wireless, King Street Wireless, Cavalier Wireless, Continuum 700, Cox Wireless, C Spire and MetroPCS.

Pursuant to Section 1.1206(b) of the Commission's rules, I am filing this notice electronically in the above-referenced docket. Please contact me directly with any questions.

Respectfully submitted,

/s/ Michele C. Farquhar

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cc: Commissioner McDowell
Angela Giancarlo

AT&T-Qualcomm and the Need for a Consolidated Lower 700 MHz Band Class

Presentation to Commissioner McDowell

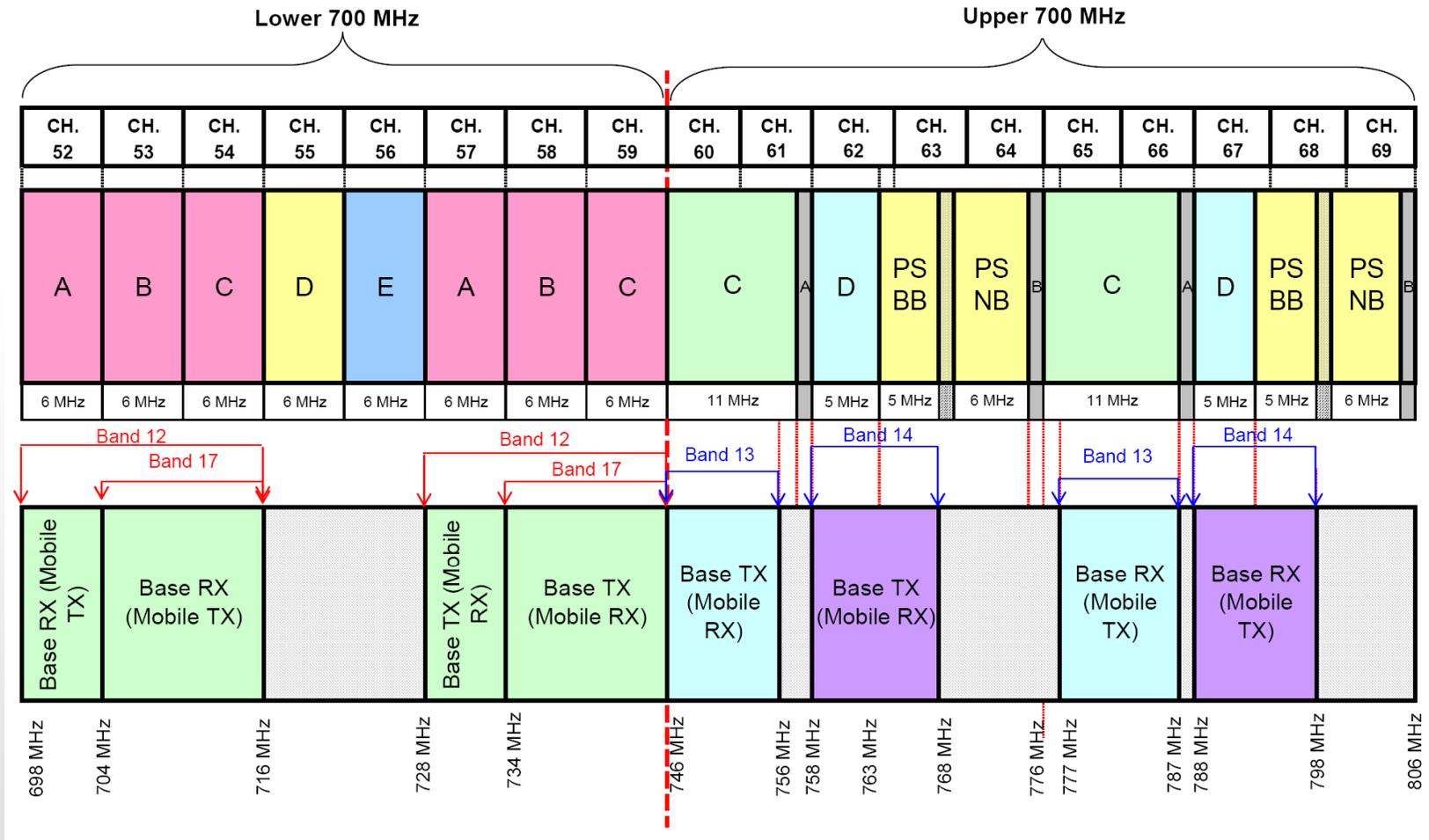
Vulcan Wireless

December 2, 2011

Recommended FCC Action: The FCC should adopt only a single condition on the AT&T-Qualcomm transaction that will help reconsolidate and unify the paired spectrum in the Lower 700 MHz band while allowing AT&T to proceed with its current deployment plans

- *After the transaction closes, any mobile device offered by AT&T that operates on paired Lower 700 MHz band spectrum must operate on all Lower 700 MHz band paired spectrum. This condition only applies to new devices, beginning as early as 6 months after the transaction closes and fully implemented two years following the close of the transaction*

U.S. 700 MHz Band Plan & 3GPP Band Standards for LTE Equipment



Activity Timeline for 700 MHz Band Class Pre- and Post- Auction 73

Dec 2007 (prior to auction) Only Band Class 12 is before 3GPP

March 2008 Auction closes

April 2008 Motorola submits paper to 3GPP proposing Band Class 17 – only covers B and C Blocks

June 2008 Ericsson questions reason for fracturing the band into separate band classes; Ericsson removes objections after AT&T supports Band Class 17

September 2008 3GPP ratifies Band Class 17 and Band Class 13 (Verizon's Upper C Block)

September 2009 A Block licensees petition FCC for device interoperability

December 2010 3GPP ratifies Band Class 12 with 1 MHz guard band

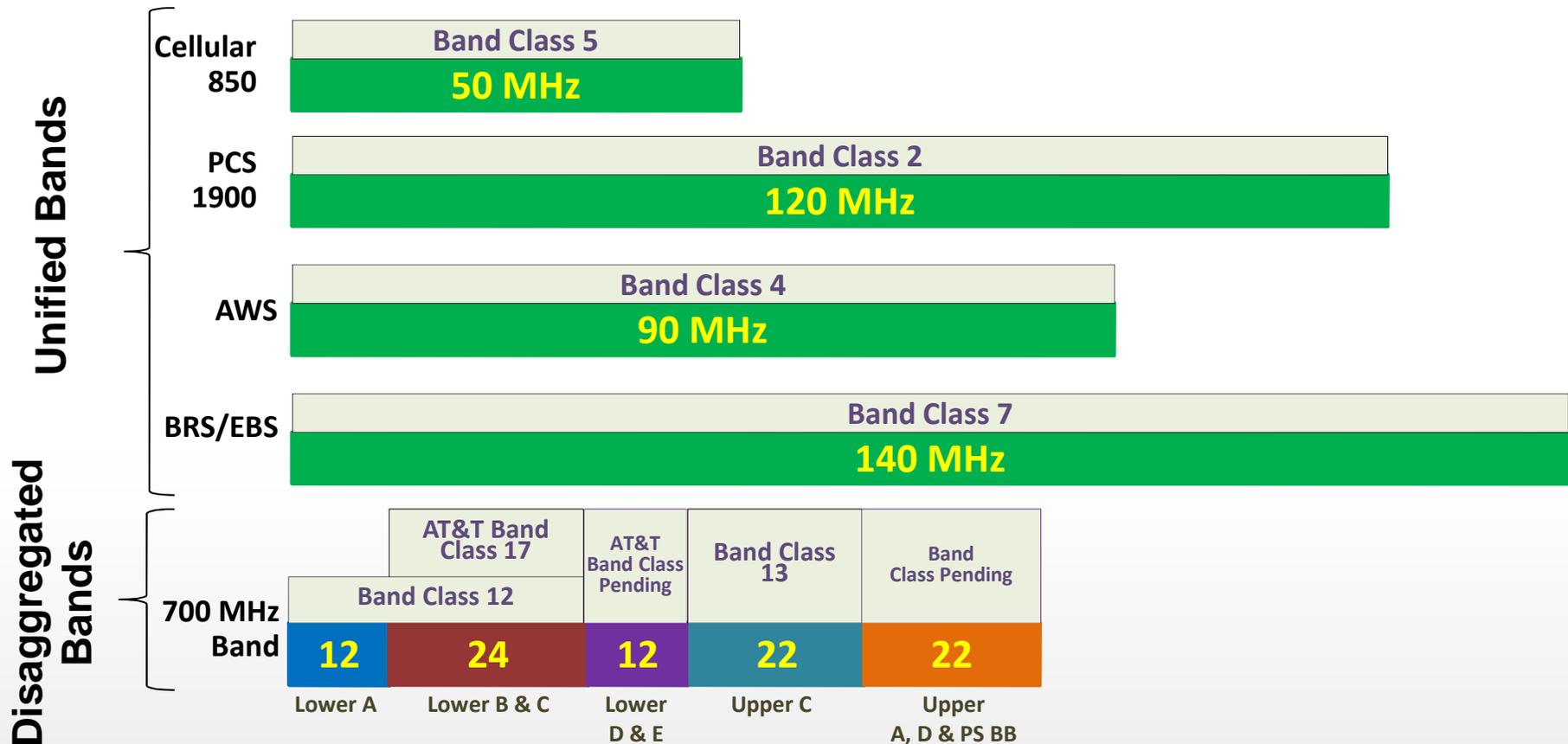
2011 (ongoing) VZ deploys 4G LTE covering more than 175 cities and more than 186 million Americans

2011 (ongoing) AT&T launches 4G LTE in 15 cities and to reach 70 million Americans by the end of 2011

2011 Band Class 12 licensees still await access to competitive handset ecosystem

November 2011 Ericsson requests that an additional 1 MHz of guard band be provided by Band Class 12 to protect spectrum being acquired from Qualcomm; AT&T speaks at 3GPP in favor of request

Post-merger, AT&T would control approximately 75% of the spectrum in the Lower 700 MHz band. While Verizon holds Lower 700 MHz A Block licenses, it has not provided any time frame for building out that spectrum. AT&T effectively dictates to the vendor community in the lower 700 MHz band.



➤ **With 700 MHz, the 3GPP process has been unduly influenced to force disaggregation**
 The unique use of 700 MHz frequencies exclusively in the US has given AT&T (a dominant 700 MHz spectrum holders) excessive influence, as there are no large international carriers using the same spectrum. This has led to unprecedented band class fragmentation and delays, slower ecosystem development and less consumer choice.

Pro-Consumer and Pro-Competition FCC Policies Have Been Circumvented

- The April 2011 FCC Workshop on Interoperability revealed that primarily business reasons, more so than technical reasons, drove 700 MHz band plan fragmentation
- If AT&T is allowed to hide behind the claim that its mobile devices do not interoperate with other 700 MHz spectrum, then competition, consumer choice, and small carrier investment and jobs will suffer
- A lack of interoperability also directly undercuts roaming and reduces 911 availability.
- Without FCC action now, before the lower 700 MHz band becomes permanently fractured like public safety networks, the opportunity to correct the situation may become forever lost

The Solution

Recommended FCC Action:

The FCC should adopt only a single condition on the AT&T-
Qualcomm transaction that will help reconsolidate and unify the
paired spectrum in the Lower 700 MHz band while allowing
AT&T to proceed with its current deployment plans

The AT&T-Qualcomm License Transfer Would Exacerbate the Interference and Deployment Problems Experienced by A Block Licensees in Band Class 12

- The AT&T-Qualcomm acquisition, if approved, would magnify AT&T's market power in the Lower 700 MHz band and increase its ability to exert undue influence within the 3GPP process to the detriment of other Lower 700 MHz band licensees.
- AT&T's Planned Acquisition of the D & E Blocks Has Already Negatively Impacted Band Class 12 Licensees
 - As recent as two weeks ago at 3GPP, AT&T spoke in favor of a proposal regarding base station operations that would require Band 12 licensees to set aside 1 MHz of their spectrum to go unused as guard band to support AT&T's D Block operations, rather than requiring AT&T to solely provide their own guard band
 - **AT&T's Declaration to the FCC** on January 12, 2011 stated: "AT&T's deployment of D & E block base station should have little effect on future deployments of A, B, and C-Block base stations by AT&T or any other licensee."
- Moreover, if the acquisition is approved, AT&T will have no incentive to cooperate with Lower Band licensees on *any* issues that may arise in the Lower 700 MHz Band, as it will function as a separate ecosystem. This will further threaten interoperability.

Benefits of the Proposed Condition

Simple and Straightforward

- Rebalance market forces that allow for fair competition
- Allows AT&T to transition to this solution over time
- No stranded investment because no impact on current handset sales

A solution that will evolve as mobile wireless services evolve

- Solution that addresses known issues today and unanticipated issues of tomorrow
- Does not force AT&T into a single configuration
- Allows AT&T to innovate and develop new handsets just as in other mobile bands (which all have a uniform band class)
- Ensures that Band Class 12 licensees can get devices, and that roaming is technically possible across the Lower 700 MHz band

Interference is not an impediment to interoperability

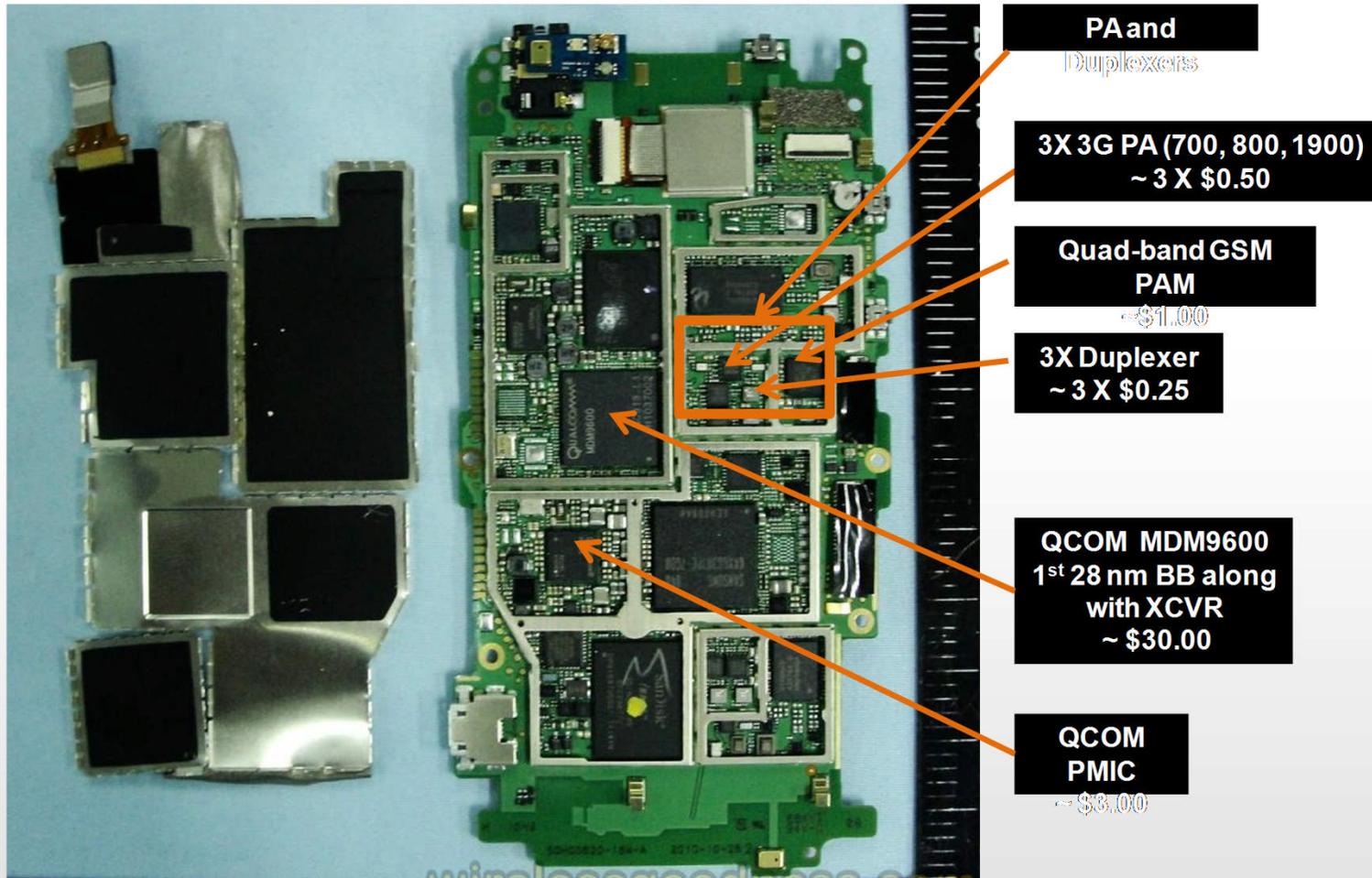
- The FCC workshop revealed that there is no technical barrier to interoperability.
- Extensive testing developed by 8 A Block operators demonstrated that there is no technical reason for separate band classes.

Extensive Study to Prove or Disprove the Unsubstantiated Assertions by AT&T for a Separate Band Class

- A consortium of several 700 MHz A Block license holders* funded a “real world” study by conducting tests and analyses regarding the underlying assumptions originally put forth regarding the need for a separate Band Class 17 in the Lower 700 MHz band that has precluded interoperability
- The comprehensive study included in-market field environmental measurements in Atlanta along with lab bench testing of AT&T 4G devices addressing:
 - Reverse Intermodulation from high power Channel 51
 - Device Blocking from high power E-Block transmissions
- Results showed that Band Class 17 B and C Blocks already suffer greater interference threats from each other than what would be introduced from a unified Lower 700 MHz Band Class. Neither high power E Block transmissions nor Channel 51 transmissions create an increased interference threat; in fact, the interference threat is lower.

*The consortium members include: Vulcan Wireless, King Street Wireless, Cavalier Wireless, Continuum 700, Cox Wireless, US Cellular, C Spire and MetroPCS.

Components that are required to enable interoperability are all < \$1 and, in quantity, have no cost impact



Device Component Bill of Materials for HTC Thunderbolt: Device Performance indicates that no changes are required except to simply broaden the duplexer to cover Lower A, B and C Blocks.