



Joan Marsh
Vice President
Federal Regulatory

AT&T Services, Inc. T: 202-457-3120
1120 20th Street, NW F: 832-213-0172
Suite 1000
Washington, DC 20036

September 17, 2012

Marlene H. Dortch
Secretary
Federal Communications Commission
445 Twelfth St., S.W.
Washington, D.C. 20554

Re: *In the Matter of Promoting Interoperability in the 700 MHz Commercial Spectrum*, WT Docket No. 12-69

Dear Ms. Dortch:

On Thursday, September 13, 2012, Robert Quinn (AT&T Senior Vice President-Federal Regulatory and Chief Privacy Officer) and I met with David Goldman, Senior Legal Advisor to Commissioner Rosenworcel. During this meeting we discussed the arguments raised by certain parties in the above-captioned proceeding that the Commission should require AT&T to use Band 12, rather than Band 17, to provide LTE services using 700 MHz spectrum. We explained that such an unprecedented intervention in the marketplace would undermine the integrity and predictability of the wireless industry's standards-setting process, retard broadband investment and deployment, threaten the reliability of existing LTE services, expose millions of consumers to additional interference risk, and yield none of the "interoperability" benefits upon which the proposed regulatory mandate is falsely premised. In particular, consistent with AT&T's comments¹ and reply comments² we discussed the following and referred to the documents attached hereto.

The Commission's Lower 700 MHz band plan allocated three paired blocks of uplink/downlink spectrum for mobile broadband services (blocks A, B, and C). It has long been recognized that the A block is subject to significant interference from two sources. On the uplink side, the A block is immediately adjacent to Channel 51, a high-powered television broadcast. On the downlink side, the A block is immediately adjacent to the E-block, which is allocated and authorized for high-powered mobile video transmissions. In addition, the Commission has adopted broad exclusion zones (*i.e.*, areas in which A block spectrum cannot be deployed) to protect Channel 51 from interference from A block transmissions.³ Participants in the Commission's 700 MHz auction understood these challenges

¹ Comments of AT&T, *Promoting Interoperability in the 700 MHz Commercial Spectrum*, WT Docket No. 12-69; *In Mobile User Equipment Across Paired Commercial Spectrum Blocks in the 700 MHz Band*, RM-11592 (Terminated) (June 1, 2012) ("AT&T Comments").

² Reply Comments of AT&T, *Promoting Interoperability in the 700 MHz Commercial Spectrum*, WT Docket No. 12-69; *Mobile User Equipment Across Paired Commercial Spectrum Blocks in the 700 MHz Band*, RM-11592 (Terminated) (June 1, 2012) ("AT&T Reply Comments").

³ See Memorandum Opinion and Order, *Reallocation and Service Rules for the 698-746 MHz Spectrum Band (Television Channels 52-59)*, 17 FCC Rcd. 1022, ¶ 16 (2002); 47 C.F.R. § 27.60.

associated with deploying an A Block network, and the current holders of A block spectrum therefore acquired their spectrum rights at much lower prices than bidders for other 700 MHz spectrum.⁴

The Third Generation Partnership Project (“3GPP”) – the collaborative international standards-setting body responsible for developing the industry standards used to deploy broadband spectrum – sought to address these significant interference issues in designing the band plan for Lower 700 MHz spectrum. 3GPP members recognized that the proposed Band 12, which includes the Lower 700 MHz A, B, and C blocks, would be subject to significant interference from Channel 51 and the E block, for the reasons discussed above. Accordingly, the 3GPP adopted Band 17 as an alternative, which supports the deployment of mobile broadband networks using only the B and C blocks, and which allows device makers to filter out most of the interference from Channel 51 and the E block to which the A block is susceptible. In reliance on the 3GPP standards for Band 17, AT&T and other entities throughout the wireless ecosystem invested billions of dollars to develop and deploy the network infrastructure, chipsets, mobile devices, software, and other components necessary to support robust Band 17 LTE services.⁵

In this proceeding, certain Lower 700 MHz licensees now ask the Commission, years after the fact, to mandate that all Lower 700 MHz licensees use Band 12. These licensees argue that such a mandate is necessary for two reasons, but in fact neither reason is correct.

First, they argue that unless the Commission requires AT&T to switch to Band 12, device manufacturers will lack sufficient scale to create affordable Band 12 devices. Marketplace developments in 2012 have already refuted these assertions. U.S. Cellular – the only U.S. carrier that has actually deployed a Band 12 network – already offers multiple Band 12 devices to its customers, including two smartphones, a tablet, a Wi-Fi hotspot, and a data card,⁶ and U.S. Cellular has announced that it will be “[a]dding up to 4 more 4G LTE devices in 2012.”⁷ U.S. Cellular’s suite of Band 12 devices even includes the Samsung Galaxy S III, which is widely recognized to be among the most advanced and desirable LTE handsets in the marketplace today.⁸

Second, regulation proponents claim that a Band 12 mandate is necessary to give A block licensees nationwide roaming opportunities. This claim rests on the false premise that such licensees are limited to Band 12 roaming partners. In fact, with broad availability of multi-band LTE chipsets, every operator has many LTE roaming options. AT&T’s LTE devices, for example, have both Band 17 (700

⁴ In Auction 73, A block licenses sold for an average of \$1.13 per MHz POP, compared to an average of \$2.65 per MHz POP paid for B block spectrum. See Blair Levin et al., Stifel Nicolaus, *Special Focus: The Wireless World After 700 MHz*, at 2, 4, *Washington Telecom, Media & Tech Insider* (Mar. 28, 2008).

⁵ See AT&T Comments, at 19-20; AT&T Reply Comments, at 20-28.

⁶ See AT&T Comments, at 11; AT&T Reply Comments, at 3-4.

⁷ U.S. Cellular, Second Quarter 2012 Results and Guidance, at 7 (Aug. 3, 2012), available at <http://phx.corporate-ir.net/phoenix.zhtml?c=106793&p=irol-IRHome>.

⁸ See AT&T Comments, at 11; AT&T Reply Comments, at 3-4. The record further confirms that forcing AT&T to use Band 12 would not make it any easier to use AT&T’s devices. AT&T’s network uses GSM/UMTS networks as a “fall back” where LTE has not yet been deployed. Most or all A Block Band 12 licensees use CMRS networks for fall back. Therefore, Band 12 licensees would have to obtain versions of AT&T’s devices that use CMRS for fall-back, rather than GSM/UMTS. Thus, the notion that forcing AT&T to use Band 12 rather than Band 17 will permit Band 12 licensees to sell the same devices used by AT&T without making substantial and expensive modifications is wrong. See AT&T Comments, at 14; AT&T Reply Comments, at 14-15.

MHz) and Band 4 (AWS) LTE radios; future offerings will add Band 2 (Cellular) and Band 5 (PCS) LTE radios. AT&T, Verizon, Sprint, T-Mobile, Clearwire, Leap, and MetroPCS are all deploying LTE networks, and A Block licensees with no LTE device base have maximum flexibility to plan their device portfolios to support roaming on any of those networks. U.S. Cellular already uses quad-band LTE chipsets. And LTE roaming options are about to expand further with chipsets that allow a device to transmit and receive signals on up to 3 different bands below 1 GHz and 7 bands in total.⁹

While the purported benefits of a Band 12 mandate are illusory, the harms are quite real. A Band 12 mandate would subject AT&T's customers to interference from Channel 51 and the E block, which would degrade the performance of AT&T's network in terms of lower throughput, lost connections, and in some cases a complete inability to connect to the network. Moreover, second-guessing 3GPP standards years after the fact would create substantial uncertainty as to whether future 3GPP standards can be relied upon, thus undermining incentives to invest in next generation networks, equipment, devices, and applications.¹⁰

While the record does not support a Band 12 mandate, there is broad agreement among the parties that the public interest would be served by prompt Commission action to phase out high-powered Channel 51 and E Block broadcasts that are incompatible with efficient use of Lower 700 MHz spectrum. Congress has authorized Channel 51 licensees to participate in incentive auctions that could eliminate these sources of harmful interference in the long run, but there are a variety of steps the Commission can and should take now to provide Channel 51 licensees with incentives voluntarily to relocate or cease their broadcasts during the period leading up to the incentive auction. The Commission also has ample authority to ensure that the currently fallow E Block spectrum cannot be used for services that would cause significant harm in other Lower 700 MHz blocks. Strong Commission leadership in these areas will bring immense benefits: increased spectrum capacity, accelerated broadband investment, improved LTE service quality, and an environment that provides the industry with even greater flexibility to balance interoperability and other needs in ways that promote the public interest.¹¹

Respectfully Submitted,
/s/ Joan Marsh

cc: David Goldman

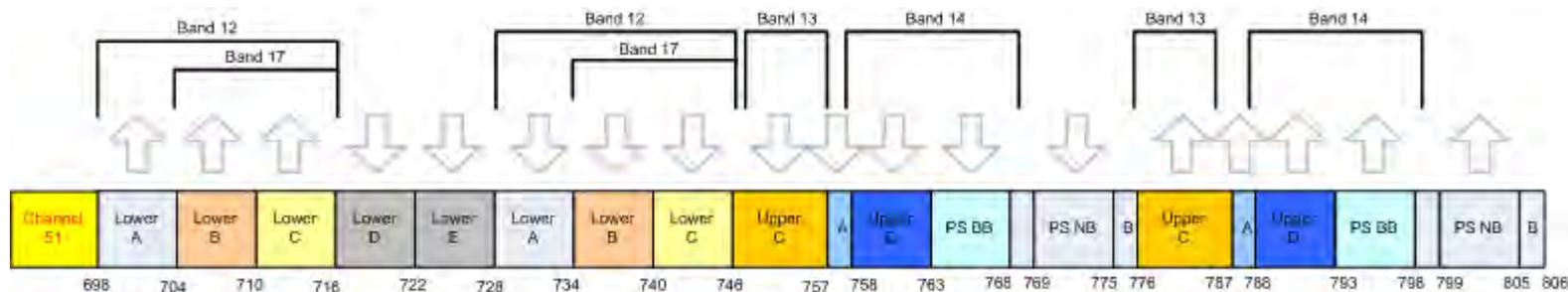
⁹ See AT&T Comments, at 16-19; AT&T Reply Comments, at 16-20.

¹⁰ See AT&T Comments, at 19-35; AT&T Reply Comments, at 20-25.

¹¹ See AT&T Comments, at 43-50; AT&T Reply Comments, at 62-71.

ATTACHMENT A

700 MHz Band Plan



The diagram above shows the 700MHz spectrum plan as defined by the FCC and the band plan as defined by 3GPP

- In the Lower 700MHz Band, there are 3 paired blocks forming the Lower A, B, and C blocks (6 + 6 MHz) and 2 unpaired blocks D & E (6 MHz)
- In the Upper 700MHz Band there are 6 paired blocks forming the Upper C (11 + 11 MHz), Upper D (5 + 5 MHz), Upper A & B (1 + 1 MHz), Public Safety Broadband (5 + 5 MHz), and Public Safety narrowband (6 + 6 MHz) plus a 1 + 1 MHz guard band between the PSBB and PSNB

The arrows show the 3GPP recommended device transmit and receive directions (duplex direction)

- Up arrows denote device transmit (Up-Link)
- Down arrows denote device receive (Down-Link)

ATTACHMENT B

3GPP LTE FDD AND TDD BANDS

Table 5.5-1 E-UTRA operating bands

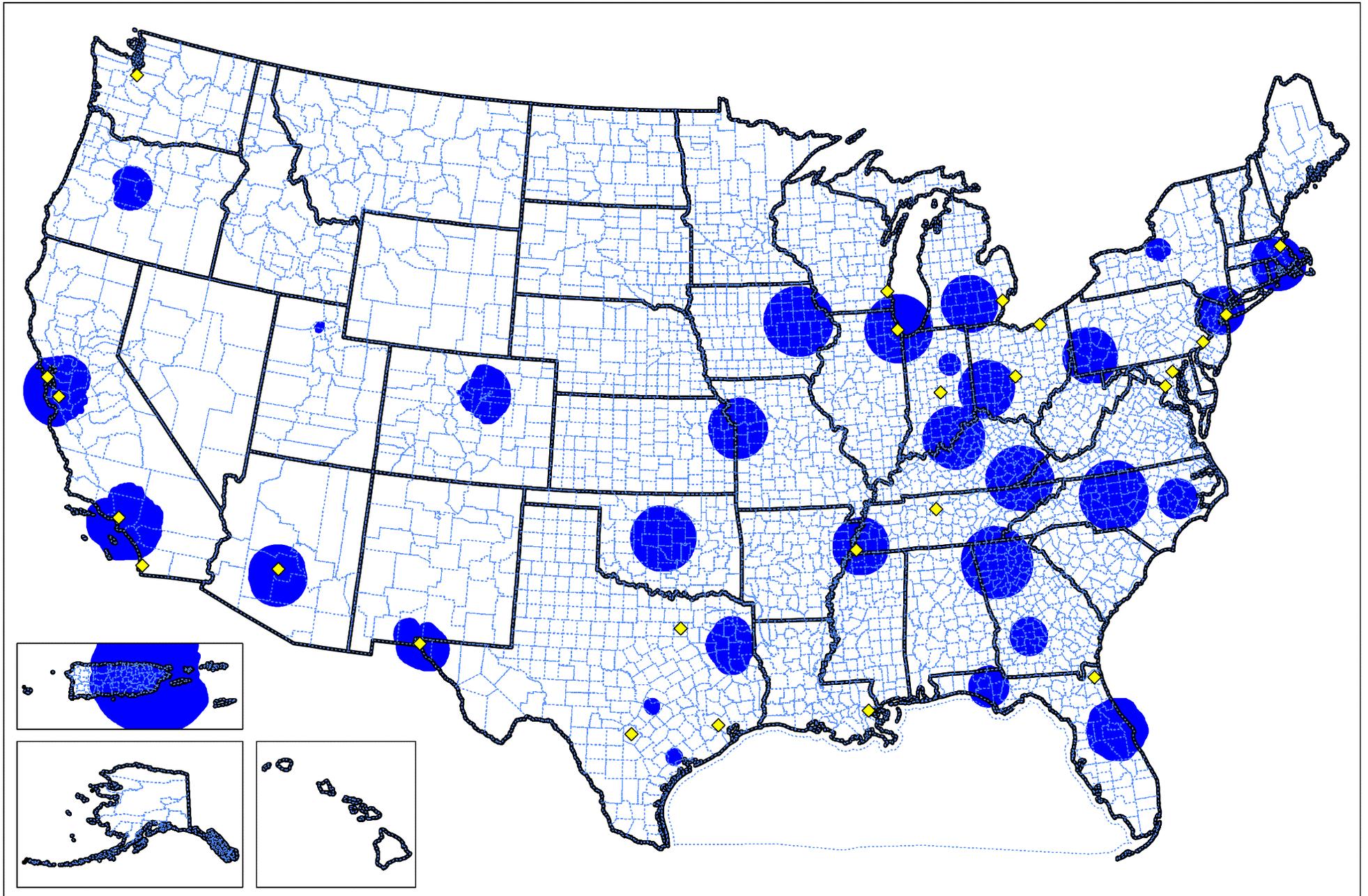
E-UTRA Operating Band	Uplink (UL) operating band BS receive UE transmit	Downlink (DL) operating band BS transmit UE receive	Duplex Mode
	F _{UL low} – F _{UL high}	F _{DL low} – F _{DL high}	
1	1920 MHz – 1980 MHz	2110 MHz – 2170 MHz	FDD
2	1850 MHz – 1910 MHz	1930 MHz – 1990 MHz	FDD
3	1710 MHz – 1785 MHz	1805 MHz – 1880 MHz	FDD
4	1710 MHz – 1755 MHz	2110 MHz – 2155 MHz	FDD
5	824 MHz – 849 MHz	869 MHz – 894MHz	FDD
6 ¹	830 MHz – 840 MHz	875 MHz – 885 MHz	FDD
7	2500 MHz – 2570 MHz	2620 MHz – 2690 MHz	FDD
8	880 MHz – 915 MHz	925 MHz – 960 MHz	FDD
9	1749.9 MHz – 1784.9 MHz	1844.9 MHz – 1879.9 MHz	FDD
10	1710 MHz – 1770 MHz	2110 MHz – 2170 MHz	FDD
11	1427.9 MHz – 1447.9 MHz	1475.9 MHz – 1495.9 MHz	FDD
12	699 MHz – 716 MHz	729 MHz – 746 MHz	FDD
13	777 MHz – 787 MHz	746 MHz – 756 MHz	FDD
14	788 MHz – 798 MHz	758 MHz – 768 MHz	FDD
15	Reserved	Reserved	FDD
16	Reserved	Reserved	FDD
17	704 MHz – 716 MHz	734 MHz – 746 MHz	FDD
18	815 MHz – 830 MHz	860 MHz – 875 MHz	FDD
19	830 MHz – 845 MHz	875 MHz – 890 MHz	FDD
20	832 MHz – 862 MHz	791 MHz – 821 MHz	FDD
21	1447.9 MHz – 1462.9 MHz	1495.9 MHz – 1510.9 MHz	FDD
22	3410 MHz – 3490 MHz	3510 MHz – 3590 MHz	FDD
23	2000 MHz – 2020 MHz	2180 MHz – 2200 MHz	FDD
24	1626.5 MHz – 1660.5 MHz	1525 MHz – 1559 MHz	FDD
25	1850 MHz – 1915 MHz	1930 MHz – 1995 MHz	FDD
26	814 MHz – 849 MHz	859 MHz – 894 MHz	FDD
27	807 MHz – 824 MHz	852 MHz – 869 MHz	FDD
28	703 MHz – 748 MHz	758 MHz – 803 MHz	FDD
...			
33	1900 MHz – 1920 MHz	1900 MHz – 1920 MHz	TDD
34	2010 MHz – 2025 MHz	2010 MHz – 2025 MHz	TDD
35	1850 MHz – 1910 MHz	1850 MHz – 1910 MHz	TDD
36	1930 MHz – 1990 MHz	1930 MHz – 1990 MHz	TDD
37	1910 MHz – 1930 MHz	1910 MHz – 1930 MHz	TDD
38	2570 MHz – 2620 MHz	2570 MHz – 2620 MHz	TDD
39	1880 MHz – 1920 MHz	1880 MHz – 1920 MHz	TDD
40	2300 MHz – 2400 MHz	2300 MHz – 2400 MHz	TDD
41	2496 MHz – 2690 MHz	2496 MHz – 2690 MHz	TDD
42	3400 MHz – 3600 MHz	3400 MHz – 3600 MHz	TDD
43	3600 MHz – 3800 MHz	3600 MHz – 3800 MHz	TDD
44	703 MHz – 803 MHz	703 MHz – 803 MHz	TDD

NOTE 1: Band 6 is not applicable

ATTACHMENT C

Primary (Full Power, Class A) TV 51 Contours

FCC 41 dBu contour data & TV Query data as of Feb. 15, 2012



ATTACHMENT D

RSS FEED

Blog Search

Go

AT&T Public Policy Blog

News, perspectives and thoughts on government broadband policies

No MHz Left Behind

Posted by: [Joan Marsh](#) on March 23, 2012 at 11:25 am

Rick Kaplan, the FCC's Wireless Bureau Chief, could not have been more correct when he declared his mission at this week's open meeting to be "no MHz left behind." Given the scarcity of available spectrum – and the challenges the FCC is facing trying to free up new spectrum for mobile Internet use – ensuring that all licensed spectrum is fully and efficiently deployable is essential.

At this week's Open Meeting, the FCC [opened a proceeding](#) to explore solutions for interoperability in the lower 700 MHz band. Some have and will continue to focus on only the narrow question of the use of two band classes in the lower band and whether the FCC should require the use of a single band class. These entities would like the FCC to simply ignore the significant interference challenges that led the [3GPP standards-setting body](#) to create two band classes in the first place.

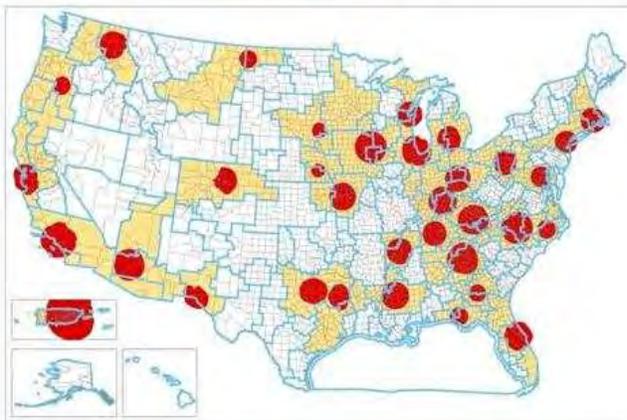
But, contrary to what some carriers claim, it is not the existence of two band classes that is preventing lower A-block deployment. Band Class 12 chipsets are available. US Cellular has announced the rollout of its [4G LTE network](#) in the lower 700 MHz band and its first two LTE devices – a Samsung Galaxy smartphone and tablet. And they promise that more devices will be rolled out this year. C-Spire is also expected to proceed this year with its A-block LTE deployment.

The far bigger deployment challenge in the Lower 700 MHz band is one that few folks have wanted to talk about. The hard fact is that current FCC rules flat out prohibit 700 MHz A-block deployment in more than 30 markets across the country, including New York City, San Francisco and Chicago – markets where additional spectrum and network capacity are the most urgently needed. These deployment holes, or "exclusion zones," are the product of FCC rules that prohibit the operation of 700 MHz A-block devices in the areas where there are over-the-air Channel 51 broadcast signals.

The map below shows in red the contours of the broadcast signals for current Channel 51 licensees with an overlay of EA market boundaries for the A-block licenses impacted. These broadcast areas create a patchwork of holes across the nation where A-block deployment will continue to be prohibited until the regulatory challenges of the lower 700 MHz band are fully confronted and resolved.

AT&T is committed to the search for real solutions that will allow full deployment of the 700 MHz lower A-block. Full deployment in the lower 700 MHz band will not be achieved without addressing this challenge. No MHz left behind will be our battle cry as well.

DTV Channel 51 Contours
EA Market Boundary Overlay & EAs Impacted



TOPICS: [Broadband](#), [FCC](#), [Internet](#), [Mobile](#), [Spectrum](#), [Wireless](#)

SHARE

Worth a Read

- [White House launches new mobile app](#)
Hillicon Valley
- [FCC to test mobile broadband performance for consumers](#)
CNET
- [Dems Commit to Unfettered Internet](#)
Broadcasting & Cable
- [FCC to review how it measures competition](#)
Hillicon Valley

READ MORE »

Featured Posts

- [Taking the Pledge to Never Text and Drive](#)
- [Unlocking Our Nation's Spectrum Resources](#)
- [The Power of Licensed Spectrum](#)

Recent Tweets from @ATTPublicPolicy

RT @CTIA: Before today's @HouseCommerce hearing on apps, we take a look at the app economy. Significant econ and societal impact <http://t.co/XP2vZVse>

about 3 hours ago from web

New Survey: Teens are among the fastest adopters of smartphones <http://t.co/A0JFbrFa> (via @ceciliakang)

about 19 hours ago from Spredfast

.@RedCross Study: 20% of Americans have used #mobile apps for help and info during emergencies <http://t.co/GIZAdb36>

09/11/2012 from Spredfast

The FCC is taking a vital step that will foster growth & encourage wireless innovation - @CTIA on #spectrum auctions <http://t.co/5F16UWL5>

09/10/2012 from Spredfast

FOLLOW US ON TWITTER »

Topics

- [Accessibility](#)
- [Administration](#)
- [Broadband](#)
- [Broadband Classification](#)
- [Broadband Policy](#)

ATTACHMENT E

RSS FEED

AT&T Public Policy Blog

News, perspectives and thoughts on government broadband policy

Interference Testing Sleight of Hand

Posted by: [Joan Marsh](#) on July 18, 2012 at 12:55 pm

Last Friday, a group of lower 700 MHz A block licensees submitted [new interference testing and a report](#) purporting to analyze the relative impact of Channel 51 and E block signals on Band 12 and Band 17 devices. The lengthy report claims to show that Band 12 LTE devices are unlikely to experience interference levels high enough to translate to reduced performance in a 700 MHz B and C block LTE deployment like that being completed by AT&T.

While we have not yet had a chance to fully review the submission, even a cursory review of the report raises significant credibility issues for both the testing methodology employed and the field results submitted.

Consider these two examples:

First, the report presents the results of a purported Channel 51 interference field test using actual Band 12 devices in Waterloo, Iowa, where U.S. Cellular is apparently now operating a Band 12 network using the B and C blocks. The report asserts that this field test demonstrates that the Band 12 devices worked fine in the presence of Channel 51 interference. But the nearest Channel 51 transmitter (Cedar Rapids/Crowley) is located about 30 miles away from Waterloo proper, and the drive route used for the testing was largely in the surrounding countryside even *farther* from the Channel 51 tower.

It is not surprising that Channel 51 transmissions originating up to 40 or 50 miles away would have little or no measurable impact on the performance of a Band 12 device – at that distance the Channel 51 signal is simply too weak to cause a strong interfering reverse intermodulation product. And because the report discloses only averages of the field test readings, any poor performance measured in the very small portion of the drive test route that ventured within 20 miles of the Channel 51 station would certainly be masked by the large number of test points in areas where Channel 51 signal levels are necessarily very low.

The Waterloo field test therefore offers little evidence relevant to the interference that can be expected in the many areas where a Channel 51 broadcaster's tower is located in or nearby major urban areas.

For example, the Waterloo field test says nothing about the harmful interference that would be expected from [KPXE's](#) CH 51 transmitter, which is located in the south central part of Kansas City, or [WPWR's](#) CH 51 transmitter, which is located on top of Chicago's [Willis Tower](#) in the middle of the Loop – or even the harmful interference customers actually in the vicinity of the Cedar Rapids/Crowley Channel 51 tower would experience.

v

■

■

■

■

F

■

■

■

R

R

@

te

e

h

a

N

a

h

ATTACHMENT F

RSS FEED

Blog Search

Go

AT&T Public Policy Blog

News, perspectives and thoughts on government broadband policies

Unlocking the Value of the Lower 700 MHz A Block

Posted by: [Joan Marsh](#) on June 1, 2012 at 12:57 pm

Today, opening [comments](#) are being filed in the FCC's recently initiated [700 MHz interoperability proceeding](#). As our comments fully demonstrate, the interference challenges in the lower 700 MHz band are real and material. The high power broadcasts permitted in broadcast TV channel 51 and in the 700 MHz lower E block create the potential for debilitating interference into the lower A and B blocks that could dramatically degrade wireless service. Indeed, these interference concerns led to the creation of [3GPP Band 17](#), which allows carriers to operate in the B and C blocks while filtering out the interference from the high power transmissions adjacent to the A block.

Despite this clear evidence, some carriers will still insist that an interoperability mandate requiring all carriers in the lower 700 MHz band to rely on Band 12 is both appropriate and necessary to ensure full deployment of the A block. But such an unprecedented countermanding of industry standards is a lose-lose proposition that could delay LTE deployment and expose millions of current LTE customers to poor reception, dropped calls and slower data speeds.

Moreover, such a mandate would fall far short of solving the real challenges crippling the A block.

First, such a mandate is not necessary to create the Band 12 device ecosystem the A block carriers desire. Manufacturers can and already do create Band 12 variants of LTE devices designed for other 700 MHz bands at negligible additional cost. Indeed, US Cellular has already announced the introduction of a number of Band 12 devices and its intention to bring more on line this year.

But more to the point, it is highly unlikely that any of the A block carriers demanding interoperability relief would be able to use an AT&T Band 12 device even if it did exist. AT&T's LTE devices will all fall back to GSM technologies. The A block carriers are virtually all CDMA providers that will require CDMA fall back in their devices. For this reason, it should be no surprise that US Cellular's Band 12 LTE devices are variants of Verizon's Band 13 devices – not of AT&T's Band 17 devices.

Second, such a mandate is not necessary to increase roaming opportunities for A block carriers. 4G devices are increasingly multi-band devices. Indeed, no carrier is likely to offer LTE on a single band and thus all will have to develop devices that support multiple bands. Nothing prevents Band 12 carriers from dual-banding to Band 17, Band 4 (AWS) or any other band used by its roaming partners.

Finally, a mandate would do nothing to eliminate the [CH 51 exclusion zones](#), areas where A block carriers simply cannot deploy. These no-build zones gut rational deployment plans and make efficient use of the A block virtually impossible. The exclusion zone problem is so significant that when a carrier recently announced the sale of a significant A block footprint, T-Mobile, a carrier that alleges to be in dire need of spectrum, was quick to publicly proclaim the [A block spectrum unusable](#). The A block has become known as beachfront property with an oil spill.

For these reasons, the Commission must reject calls for a mandate and instead focus its resources on finding real solutions to the A block challenges. Solutions are achievable. For example, the Commission can harmonize the lower E block to impose service and power limits on all E block licenses similar to the limits imposed on the E block licenses AT&T acquired from Qualcomm. Such a move would not only eliminate the potential for A block interference from the E block, but it would harmonize operations in the E block with operations throughout the lower 700 MHz band – a necessary goal for efficient deployment throughout the band.

Also, as a narrowly targeted, interim solution to the CH 51 challenge, the Commission should adopt rules that will encourage the accelerated clearance of CH 51, while allowing CH 51 licensees to maintain the full right to participate as permitted in the upcoming broadcast TV incentive auction. AT&T outlines in its comments some options that could achieve this goal, but welcomes ideas and input from all interested parties. Working together, I believe there are opportunities to clear CH 51 in the short term while preserving CH 51 broadcast rights to reverse auction proceeds and relocation funds.

Only real solutions will drive the win-win proposition that will remedy the lower 700 MHz band issues and result in full utilization of the A block. It's been over four years since the [700 MHz auction](#). The wireless industry deserves real solutions and should settle for nothing less.

TAGS: [700 MHz](#), [consumers](#), [FCC](#), [featured](#), [interoperability](#), [spectrum](#)

Worth a Read

- [White House launches new mobile app](#)
Hillicon Valley
- [FCC to test mobile broadband performance for consumers](#)
CNET
- [Dems Commit to Unfettered Internet](#)
Broadcasting & Cable
- [FCC to review how it measures competition](#)
Hillicon Valley

[READ MORE »](#)

Featured Posts

- [Taking the Pledge to Never Text and Drive](#)
- [Unlocking Our Nation's Spectrum Resources](#)
- [The Power of Licensed Spectrum](#)

Recent Tweets from @ATTPublicPolicy

RT @CTIA: Before today's @HouseCommerce hearing on apps, we take a look at the app economy. Significant econ and societal impact <http://t.co/XP2vZVse>

about 3 hours ago from web

New Survey: Teens are among the fastest adopters of smartphones <http://t.co/A0JFbrFa> (via @ceciliakang)

about 19 hours ago from Spredfast

.@RedCross Study: 20% of Americans have used #mobile apps for help and info during emergencies <http://t.co/GIZAdb36>

09/11/2012 from Spredfast

The FCC is taking a vital step that will foster growth & encourage wireless innovation - @CTIA on #spectrum auctions <http://t.co/5FI6UWL5>

09/10/2012 from Spredfast

[FOLLOW US ON TWITTER »](#)

Topics

- [Accessibility](#)
- [Administration](#)
- [Broadband](#)
- [Broadband Classification](#)
- [Broadband Policy](#)

ATTACHMENT G

RSS FEED

Blog Search

Go

AT&T Public Policy Blog

News, perspectives and thoughts on government broadband policies

Why a Mandate Won't Solve the Real Challenges in the Lower 700 MHz Band

Posted by: [Joan Marsh](#) on July 16, 2012 at 12:37 pm

Today, AT&T will file reply comments with the FCC in a [proceeding](#) launched to explore interoperability challenges in the lower 700 MHz spectrum bands. Amid the noise of the opening round of comments, fundamental facts have emerged that underscore that the proposed elimination of Band 17 would be profoundly poor public policy.

First, the proposed interoperability mandate sought by some commentators would be pointless. The A Block licensees' central claim is that they cannot obtain Band 12 devices without a mandate. This claim has now been soundly rebutted. Although the first A Block LTE service was only recently launched, A Block licensees already have access to Band 12 handset, tablet, and hotspot variants of devices first produced for other LTE bands, most significantly, Verizon's Band 13 LTE devices that fall back to CDMA technologies.

Ignoring that fact, A Block licensees speculate that, absent a regulatory mandate, device manufacturers might not offer them the latest, greatest LTE devices, or might not do so at a reasonable price. That concern too has now been debunked. U.S. Cellular, the only provider currently operating in Band 12, [just announced](#) that it is offering a Band 12 variant of Samsung's newest flagship LTE smartphone – widely considered this summer's "blockbuster Android smartphone" – *at the same time and at the same retail price* as AT&T and Verizon. Indeed, Samsung is debuting its Galaxy S III smartphone with *five different U.S. providers* – each of which uses different spectrum bands. This simply confirms [what AT&T has long argued](#) – that LTE deployment in the United States will be a fragmented multi-band exercise that will require multi-band solutions. Both chipset and device manufacturers understand that and are responding.

Second, the comments confirm that an AT&T Band 12 device would be virtually worthless to any A block licensee requiring CDMA fall back. [As one A Block licensee candidly noted](#), a Band 12 mandate "makes no difference to people like us. ... If AT&T is forced to go from 17 to 12, they will still have GSM fallback, so that wouldn't open up the availability of handsets to anybody."

With their "device ecosystem" arguments dismantled, the A block licensees fall back to roaming as a justification for a Band 12 mandate. But here too, the rationale falls far short. The opening comments confirmed that multiband chipsets that are already the industry norm will provide A Block carriers with robust opportunities to roam on a variety of LTE (and other) networks in addition to other Band 12 networks. U.S. Cellular already uses quad-band LTE chipsets (and, indeed, was the first to offer that capability). And LTE roaming options are about to expand further with chipsets that allow a device to transmit and receive signals on up to three different bands below 1 GHz and 7 bands in total. And not only is a Band 12 mandate unnecessary to promote roaming, it would be flatly inconsistent with the Commission's finding just last year in its [Data Roaming Order](#) that it is manifestly *not* in the public interest to require any provider to alter its network for the sole purpose of enabling roaming.

Even absent these failings, no one has disputed that a Band 12 mandate would do nothing to eliminate the CH 51 exclusion zones where A Block licensees are prohibited by the Commission's own rules from deploying wireless broadband networks.

In the end, a Band 12 mandate would provide no quantifiable public interest benefit. Yet it would exact an enormous price. As [our opening comments](#) demonstrated, the proposed mandate would not only generally undermine incentives to invest in next generation LTE networks in reliance on critical 3GPP standards, but it would specifically subject AT&T and its customers to interference that would degrade AT&T's LTE service quality and force AT&T to incur enormous and otherwise unnecessary costs in an effort to limit the harm from such interference. The record evidence now overwhelmingly confirms that the interference-related harm is real and substantial. Rigorous testing and engineering analyses demonstrate that at typical real-world power levels, Channel 51 transmissions would cause substantially degraded service – creating broad LTE "no call" zones – if AT&T were required to use Band 12 devices. And there has never been any serious debate that high power E Block transmissions would cause debilitating interference to its neighbors.

No regulatory solution will address these challenges absent full elimination of the root cause: interfering transmissions from Channel 51 and the E Block. On this point, there appears to be [growing consensus](#). Virtually every commentator agreed that the public interest would be served by prompt Commission action to prevent high-powered Channel 51 and E Block transmissions that are

Worth a Read

- [White House launches new mobile app](#)
Hillicon Valley
- [FCC to test mobile broadband performance for consumers](#)
CNET
- [Dems Commit to Unfettered Internet](#)
Broadcasting & Cable
- [FCC to review how it measures competition](#)
Hillicon Valley

[READ MORE »](#)

Featured Posts

- [Taking the Pledge to Never Text and Drive](#)
- [Unlocking Our Nation's Spectrum Resources](#)
- [The Power of Licensed Spectrum](#)

Recent Tweets from @ATTPublicPolicy

RT @CTIA: Before today's @HouseCommerce hearing on apps, we take a look at the app economy. Significant econ and societal impact <http://t.co/XP2vZVse>

about 3 hours ago from web

New Survey: Teens are among the fastest adopters of smartphones <http://t.co/A0JFbrFa> (via @ceciliakang)

about 19 hours ago from Spredfast

.@RedCross Study: 20% of Americans have used #mobile apps for help and info during emergencies <http://t.co/GIZAdb36>

09/11/2012 from Spredfast

The FCC is taking a vital step that will foster growth & encourage wireless innovation - @CTIA on #spectrum auctions <http://t.co/5FI6UWL5>

09/10/2012 from Spredfast

[FOLLOW US ON TWITTER »](#)

Topics

- [Accessibility](#)
- [Administration](#)
- [Broadband](#)
- [Broadband Classification](#)
- [Broadband Policy](#)

incompatible with efficient and effective use of the Lower 700 MHz bands. And the comments contained a number of constructive suggestions for how the Commission could proceed to achieve this result. AT&T continues to stand ready to work with the Commission, the A Block licensees and all interested stakeholders to develop win-win solutions that will promote broadband investment, spectral efficiency, interoperability and, most importantly, the interests of U.S. broadband wireless customers.

TOPICS: [Consumers](#), [FCC](#), [Internet](#), [Mobile](#), [Spectrum](#), [Wireless](#)

SHARE

Write a Comment

* Required

* Full Name:

* Email:

Website URL:

* Comment:

1500 characters available



Type the two words:



Submit

COMMENT MODERATION POLICY

AT&T pre-moderates comments on our blog before they are published. This means there will be a delay between the time a comment is submitted and it appears on the post. Profanity, or topics that are not germane to the post will not be approved for posting. If you wish to communicate with AT&T regarding customer service you may do so via phone at 1-800-331-0500. We are also available on Twitter at [@ATTCustomerCare](#).

- Cable
- Citizenship
- Competition
- Congress
- Consumers
- Cupcakes
- Cybersecurity
- Education
- Education Policy
- FCC
- FCC Wireless Competition Report
- Featured
- Government Policy
- Intercarrier Compensation
- International
- Internet
- Legislation
- Mobile
- Mobile Broadband
- Net Neutrality
- Online Safety
- Other Thoughts
- Privacy
- Public Safety
- Retransmission
- Special Access
- Spectrum
- Statements
- Sustainability
- T-Mobile Merger
- Universal Service
- Video
- VoIP
- Wireless

Our Bloggers

[Jim Cicconi](#)

[Bob Quinn](#)

[Joan Marsh](#)

[Hank Hultquist](#)

[Carl Povelites](#)

[VIEW ALL BLOGGERS »](#)

Archives

- 2012 (64 Posts)
- 2011 (88 Posts)
- 2010 (120 Posts)
- 2009 (5 Posts)

For additional public policy information, visit: