Joan Marsh
Vice President
Federal Regulatory

AT&T Services, Inc.
1120 20th Street, NW
Suite 1000
Washington, DC 20036

T: 202-457-3120
F: 832-213-0172

August 16, 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; *In the Matter of Mobile User Equipment Across Paired Commercial Spectrum Blocks in the 700 MHz Band*, RM-11592 (Terminated)

Dear Ms. Dortch:

On Tuesday, August 13, 2012, I met with Courtney Reinhard, Legal Advisor to Commissioner Pai. 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 comments[1] and reply comments[2] we discussed the following.

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

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[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] 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] 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: Courtney Reinhard

[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 20-50.

[11] *See* AT&T Comments, at 43-50; AT&T Reply Comments, at 62-71. AT&T also provided web site links to the following AT&T blog posts related to these issues: http://attpublicpolicy.com/wireless/no-mhz-left-behind; http://attpublicpolicy.com/wireless/unlocking-the-value-of-the-lower-700; http://attpublicpolicy.com/wireless/why-a-mandate-won%e2%80%99t-solve-the-real-challenges-in-the-lower-700-mhz-band; http://attpublicpolicy.com/wireless/interference-testing-sleight-of-hand