Senator Mike Lee
Questions for the Record
Gigi Sohn, Public Knowledge

1. As I stated in my opening remarks, I believe that the heart of healthy competition is consumer welfare. As a consumer advocate, you are well-positioned to speak to that issue specifically.

a. What are the anticipated effects on consumer welfare as you see them?

Public Knowledge does not believe that this merger provides any benefits to consumers. Rather, it is in violation of antitrust law as it will raise prices, substantially reduce competition, reduce innovation, and transform the wireless industry into a duopoly. As discussed in my answer to b. below, every benefit that AT&T has associated with this merger (97 percent 4G coverage and greater network capacity) can be accomplished without removing a lower-cost "maverick" competitor and therefore are not merger-specific benefits. If approved, many of the competition policies Public Knowledge will be ineffective as only two companies will eventually remain. When this occurs, it will be necessary to revisit past regulations designed for a duopoly reminiscent of the 1980s.

b. Doesn't this merger provide the opportunity for consumers to experience a more robust wireless network, with better coverage and faster data speeds, than could be accomplished by either of these companies on their own?

Public Knowledge does not foresee any specific consumer benefits from the merger of AT&T and T-Mobile, because ***all*** the benefits AT&T says will result from the merger can be achieved without the merger. AT&T today has the capability to deploy wireless broadband networks in rural America; it simply has chosen not to deploy in order to seek higher profits in heavily populated urban markets. This merger does not change the fundamental reasoning national wireless carriers avoid rural deployment. AT&T is also able to improve its capacity and network quality by investing more of its profits back into its network and using new technologies that increase spectrum capacity, and it does not need T-Mobile's infrastructure to begin that process.

Improved services from wireless carriers only come from competitive pressures as publicly traded companies must constantly decide whether to retain higher profits or invest those profits into infrastructure in order to retain their competitive stance in the market. A merger generally can be beneficial if strong competition remains to force the merged entity to continue to invest the gains in efficiency and cost reductions (such as eliminating duplicative staffing). However, in this specific instance, insufficient competition will remain, and the industry will trend towards a duopoly. As demonstrated by its history, the wireless industry does not aggressively build out infrastructure for better coverage and faster speeds when only two dominant carriers exist. In fact, a motivating factor for Congress to break up the duopoly structure through the Omnibus Budget Reconciliation Act of 1993 was the recognition that Europe was deploying advanced wireless services because it had a more competitive market than the U.S. Public Knowledge does not see how the exact same scenario will not once

again occur if the wireless industry is allowed to reconsolidate into a duopoly. It is likely that not only would quality 4G deployment suffer as a result of this merger, but that America would once again fall behind Europe and Asia for fifth generation wireless technologies and beyond.

c. Don't the great majority of consumers already have many choices when it comes to mobile providers?

A major factor that has led Public Knowledge to conclude that conditioning this merger would be ineffective is because it would create an effective wireless duopoly where AT&T and Verizon would hold nearly 80 percent market share and a GSM monopoly. While consumers currently have the choice among four national carriers that primarily compete with one another and perhaps a regional provider, we do not see how it is possible for the competitive market to survive consolidation of this magnitude. It is for this reason that an antitrust review must go beyond simply counting the number of competitors but also take into account the increased market power AT&T would obtain and substantial reduction in competition. In highly concentrated markets like the wireless industry, the Department of Justice has found that "based in large part on its extensive experience in evaluating horizontal mergers, the Department starts from the presumption that in highly concentrated markets consumers can be ***significantly harmed*** when the number of strong competitors declines from four to three, or three to two."[1]

Consumers have witnessed their choices dwindle as mergers took the place of competition over the last decade. In its May 2010 Commercial Mobile Radio Services report, the Federal Communications Commission for the first time did not find the wireless market to be competitive.[2] The agency instead found that the wireless market to be growing increasingly concentrated. Under the 2010 DoJ Horizontal Merger Guidelines, mergers in highly concentrated markets that involve an increase in the Herfindahl-Hirschman Index (HHI) of more than 100 points raise competitive concerns and more than 200 points are presumed to enhance market power.[3] Today the wireless market (FCC estimates 2,848 HHI in 2008) already exceeds both the DoJ (2,500 HHI) and FCC (2,800 HHI) definition of a heavily concentrated market. After this merger, it is estimated that the national HHI would increase by an additional 650-700 points.[4]

Even in today's market we are seeing a reduction of consumer choice depending on what factors a consumer values. For example, most if not all consumers are searching for carriers that can provide national coverage, which is provided currently by the four national carriers.

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1 Notice of Ex Parte Communication: *Economic Issues in Broadband Competition A National Broadband Plan for Our Future*, GN Dkt. No. 09-51 (released January 4, 2010) http://www.justice.gov/atr/public/comments/253393.htm

2 Federal Communications Commission, Fourteenth Report Annual Report and Analysis of Competitive Market Conditions With Respect to Mobile Wireless, Including Commercial Mobile Services (2010)

3 U.S. Department of Justice and the Federal Trade Commission Horizontal Merger Guidelines (August 19, 2010)

4 Stifel Nicolaus, Washington Telecom, Media, and Tech Insider (March 29, 2011). *AT&T/T-Mo: Data Point to Coming Brawl, Risk; Deal Still Looks Doable*

However, if a consumer is searching for a specific smartphone such as the Apple iPhone, then their choices in the 2009 market was only AT&T and today is AT&T and Verizon. While the number one factor driving consumer choice has been price, the percentage of consumers making their choice of carriers based on device is increasing. According to data produced by Nielson, 23 percent of new customers to AT&T in the first quarter of 2009 valued obtaining a specific phone as important in their choice.[5]

2. A number of regional competitors offer unlimited voice and data plans to value-oriented customers at low rates and on a no-contract basis, and are taking away customers from AT&T, Verizon, Sprint, and T-Mobile. MetroPCS in particular now offers LTE services in a number of large markets, seeking to offer what one analyst has characterized as "the best value for data at the high-end." Although these regional carriers are tiny compared to their national competitors, some have significant market share in their regions – for example, MetroPCS is reported to have 25 percent market share in Miami.

a. In your view, will these regional carriers continue to thrive and exert a competitive force in the market for wireless broadband service?

First, Public Knowledge has not been able to confirm, nor has AT&T provided evidence to confirm, that the new customers of regional providers are in fact the old customers of the national carriers. Regional players have focused heavily on targeting price sensitive consumers in niche markets. It therefore may be the case that many new customers to regional players who are price sensitive can simply be new customers to the wireless industry as a whole. Regional carriers are not a strong competitive force against AT&T because of the numerous disadvantages they have, including high prices for backhaul services ("special access"), lack of data roaming, smartphone exclusivity arrangements, limited spectrum access, and the lack of device interoperability.

In fact, AT&T itself no longer viewed regional players as competitors in the wireless market in its 2008 merger with Centennial Wireless. The excerpts on the following page reveal that with each merger, AT&T's consideration of regional competition gradually diminished until in 2008 it no longer considered it a factor. Public Knowledge believes that AT&T's effort to reverse its position on the status of competition is simply an attempt to mask the antitrust harms inherent in its merger with T-Mobile.

[5] Entner, Roger. *When Choosing a Carrier, Does the iPhone Really Matter?.* Retrieved June 8, 2011, from http://blog.nielsen.com/nielsenwire/consumer/when-choosing-a-carrier-does-the-iphone-really-matter/#more-14381

AT&T and Cingular public interest filing[6]
April 2004

"*This lack of correlation between local "market" structure and pricing is key. No matter how the market is defined, whether local or national, Professor Gilbert's study demonstrates that pricing is not driven by local competitive structure. The forces of national competition, driven by vigorous competitors at the national level, plus a significant fringe of regional providers, dictate pricing throughout the country, across all cities and regions and in rural areas as well.*"

AT&T and Dobson Public Interest Statement[7]
July 13, 2007

"*AT&T establishes its rate plans and pricing on a national basis, which means that the terms of such plans are set without reference to market structure at the CMA level. Rather, AT&T develops its rate plans, features, and prices in response to competitive conditions and offerings at the regional and national level – primarily the plans offered by the other national carriers. Infrequently, AT&T will lower prices in a local area or region to boost sales. Even in such cases, its decisions are based on the actions of the major national carriers and aggressive local competitors, including Metro PCS and Leap.*"

AT&T and Centennial Public Interest Statement[8]
November 21, 2008

"*In the mainland U.S., AT&T establishes its rate plans and pricing on a national basis, without reference to market structure at the CMA level. One of AT&T's objectives is to develop its rate plans, features and prices in response to competitive conditions and offerings at the national levels – primarily the plans offered by the other national carriers. Centennial's pricing is an inconsequential factor in AT&T's competitive decision-making. Although it is a regional carrier, because it generally competes against the national carriers throughout its footprint, Centennial looks to the offerings of the national carriers when setting its prices and plans. It sets uniform plan features and prices across its mainland U.S. service areas and currently offers only national rate plans to new subscribers in the mainland U.S.*"

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[6] *Cingular and AT&T Wireless Public Interest Statement* (p. 34)
https://wireless2.fcc.gov/UlsEntry/attachments/attachmentViewRD.jsp;ATTACHMENTS=PyXyNLwTQNpJPpBY9cjWzc9lQFmBgzQlhKRnFn7zmwjzpJHnlphT!600859641!425962567?attachmentKey=17917140&affn=0179171404013300694756609

[7] *Merger of AT&T Inc. and Dobson Communications Corporation* (p. 18)
https://wireless2.fcc.gov/UlsEntry/attachments/attachmentViewRD.jsp?applType=search&fileKey=432526191&attachmentKey=18223538&attachmentInd=applAttach

[8] *Merger of AT&T Inc. and Centennial Communications Corp, Description of Transaction, Public Interest Showing and Related Demonstrations* (p. 28)
https://wireless2.fcc.gov/UlsEntry/attachments/attachmentViewRD.jsp;ATTACHMENTS=1N6VJL5K37mPzN1G7L2XKBP7mC5jC50m96ttqVlHZr3GL1cyJSgx!-659400886!-849295342?applType=search&fileKey=843683410&attachmentKey=18355849&attachmentInd=applAttach

b. What barriers to robust competition do you see emerging or intensifying as a result of this merger?

While not an exhaustive list, Public Knowledge believes that access to handsets and spectrum are the two most critical components for robust competition and most impacted by this merger. Handset manufacturers are dependent on the wireless carrier for access to customers because the FCC has not instituted *Carterfone* rules permitting consumers to attach any lawful device to the network. By comparison, in the wireline world, the FCC's *Carterfone* ruling created two separate markets of customer equipment and network providers. As the largest two carriers continue to increase their market share and market power over the wireless industry, their ability to stifle competitors' access to the most popular handsets will be cemented. They will stifle competitors' access to handsets either through exclusive contracting, preventing device hardware interoperability, or likely both.

With regard to spectrum, it is critical to recognize that access to government-issued spectrum licenses (not just spectrum itself) is extremely scarce. Removing T-Mobile's spectrum licenses from the competitive market and consolidating it with AT&T will make it impossible for a new competitor to enter the market in the same way as T-Mobile. No amount of capital investment can allow a company to become the next T-Mobile if they do not have access to the spectrum licenses T-Mobile obtained. It is worth noting that pre-merger AT&T has not only the most spectrum in the top 21 markets but also the most highly valued spectrum in these same markets where capacity and congestion issues primarily exist.[9]

3. Clearwire, which I believe is the largest holder of spectrum in the United States, not only provides retail 4G data services but also supplies wholesale inputs to retail providers such as Sprint and Best Buy. LightSquared intends to use spectrum previously assigned to satellite use to deploy a nationwide 4G LTE network in the second half of this year and has entered into a long-term 4G roaming agreement with Leap and a wholesale arrangement with Best Buy.

a. Although you may not consider these entities to be players in the current market, what competitive effects could these companies have on the market for wireless broadband services?

b. How do you think their activities will benefit consumers?

Before responding to questions 3a and 3b, I wish to address the question of spectrum holdings, as AT&T often attempts to confuse policy makers on the nature of its spectrum holdings by focusing exclusively on quantity. Not all spectrum is created equal or valued equally in the private market. The location of spectrum, whether it is in Los Angeles, California or Alta, Utah, plays directly into its value as more customers to serve per square mile increases its scarcity. Furthermore, the properties of spectrum in terms of propagation, its capacity to penetrate obstacles, and its ability for long distance communications are all directly tied to where it exist in the electromagnetic spectrum frequency range with below 1

[9] Reardon, Marguerite (April 29, 2011). *Is AT&T a wireless spectrum hog?* [Online] In CNet News. Retrieved May 6, 2011 from http://news.cnet.com/8301-30686_3-20058494-266.html

GHz being preferred throughout the industry. It is these realities of spectrum that have led the wireless industry to lobby for additional spectrum in the 700 MHz band (known as the "beachfront" spectrum) to be relinquished from the broadcasting industry.

The chart below created by University of Tennessee College of Law Associate Professors Allen Grunes and Maurice Stucke should prove informative of current spectrum holdings of the wireless industry across all markets.[10]

Percentage Spectrum Holdings, Measured on a MHz POPs Basis by Provider, by Frequency Band* (Providers Listed by Number of Subscribers as of 2Q 2009)

Licensee	700 MHz	Cellular (850 MHz)	SMR (800/900 MHz)	PCS (1.9 GHz)	AWS (1.7/2.1 GHz)	BRS (2.5 GHz)	EBS Leases (2.5 GHz)
Verizon Wireless	42.7%	48.5%	0.0%	15.4%	15.0%	0.0%	0.0%
AT&T	24.3%	42.3%	0.0%	25.9%	11.2%	0.0%	0.0%
Sprint Nextel	0.0%	0.0%	93.0%	26.8%	0.0%	0.0%	0.0%
T-Mobile	0.0%	0.0%	0.0%	19.7%	27.5%	0.0%	0.0%
MetroPCS	0.5%	0.0%	0.0%	2.6%	5.9%	0.0%	0.0%
US Cellular	2.7%	4.3%	0.0%	1.8%	2.0%	0.0%	0.0%
Leap	0.0%	0.0%	0.0%	2.3%	8.8%	0.0%	0.0%
Other	29.8%	4.9%	7.0%*	5.5%	29.6%	13.7%*	38.0%*
Clearwire	0.0%	0.0%	0.0%	0.0%	0.0%	86.3%*	62.0%*
Grand Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

With regard to Clearwire's competitive effect on the wireless market, we believe its entry has had limited benefits to consumers and that its future remains uncertain. News accounts report that Clearwire may in fact be abandoning the residential broadband market to become a pure wholesale alternative.[11] However, its success as a wholesale provider will be dependent on its capacity to continue securing new investments, which it has found increasingly challenging.[12]

As for LightSquared, Public Knowledge has long advocated for additional wholesale access opportunities within the wireless industry as a means to increase competition and consumer choice. Public Knowledge, in fact, endorsed LightSquared's petition at the Federal Communications Commission on this very premise. However, we do not think LightSquared's entry will cure all the competitive issues inherent in the mobile broadband market. We do think it will provide an opportunity for one more major competitor to enter the market to improve the current status of the market, but given that additional serious political challenges have appeared, we are concerned that this opportunity may never arrive.

Currently, the company must ensure that its service does not cause harmful interference to Global Positioning System (GPS) services (a burden that is unique to LightSquared). As

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[10] Allen P. Grunes & Maurice E. Stucke, "*Antitrust Review of the AT&T/T-Mobile Transaction*," (2010) at 5. Available at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1850103 ("Grunes & Stucke")

[11] Bode, Karl (2011, February 10). *Clearwire Ditching Retail, Going Wholesale Only? Multiple Sources Say An Announcement Is Coming.* [Online] In Broadband DSL Reports. Retrieved April 25, 2011 from http://www.dslreports.com/shownews/Clearwire-Ditching-Retail-Going-Wholesale-Only-112659

[12] The Street Wire. (2011, June 6). *Clearwire Stock Hits New 52-Week Low.* Retrieved from http://www.thestreet.com/story/11144036/1/clearwire-stock-hits-new-52-week-low-clwr.html

opposed to the rosy scenario AT&T wishes for antitrust regulators to believe, so far 33 Senators and 66 House Representatives have raised concerns with the creation of LightSquared.[13] In fact, in the recently House passed National Defense Authorization Act for Fiscal year 2012 (HR 1540), the House Armed Services Committee contemplated legislative language that would have potentially ended LightSquared for the foreseeable future. While this language was modified, the House Armed Services Committee's position is that it remains "*concerned about the impact on U.S. national security resulting from potential harmful interference with GPS.*"[14] We foresee continued opposition to the creation of LightSquared, namely by the GPS industry, and until these obstacles are overcome and the company truly begins deployment, no one can truly assess the competitive effect LightSquared would bring to the market.

[13] Shields, Todd (2011, May 22). *LightSquared questioned by Senators.* [Online] In BNet. Retrieved June 7, 2011 from http://findarticles.com/p/news-articles/examiner-the-washington-dc/mi_8118/is_20110522/lightsquared-questioned-senators/ai_n57529739/?tag=content;selector-search

[14] Report of the Committee on Armed Services House of Representatives on H.R. 1540 (May 17, 2011) http://www.gpo.gov/fdsys/pkg/CRPT-112hrpt78/pdf/CRPT-112hrpt78.pdf