Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C.  20554

In the Matter of
Applications for Consent to Transfer of Control
of Licenses and Section 214 Authorizations
from
BELL SOUTH CORPORATION  )  WC Docket No. 06-74
  Transferor

to

AT&T Inc.
  Transferee

JOINT EX PARTE OF AT&T INC. AND BELL SOUTH CORPORATION

James D. Ellis  
Wayne Watts  
Gary L. Phillips  
AT&T Inc.  
175 E. Houston  
San Antonio, Texas 78205  
Telephone: (210) 351-3476  
Fax: (210) 351-3257

Marc Gary  
James G. Harralson  
Bennett L. Ross  
BellSouth Corporation  
1155 Peachtree Street, NE  
Atlanta, Georgia 30309  
Telephone: (404) 249-2641  
Fax: (404) 24902385

Submitted:  August 4, 2006
Of Counsel:

Arnold & Porter LLP
555 Twelfth Street, NW
Washington, D.C. 20004
Telephone: (202) 942-6060
Fax: (202) 942-5999

Crowell & Moring LLP
1001 Pennsylvania Avenue, NW
Washington, D.C. 20004
Telephone: (202) 624-2500
Fax: (202) 628-5116

Sidley Austin LLP
1501 K Street, NW
Washington, D.C. 20005
Telephone: (202) 736-8088
Fax: (202) 736-8711

Wiley Rein & Fielding LLP
1776 K Street, NW
Washington, D.C. 20006
Telephone: (202) 719-7000
Fax: (202) 719-7049

Axinn, Veltrop & Harkrider LLP
1370 Avenue of the Americas
New York, NY 20019-4602
Telephone: (212) 728-2200
Fax: (212) 728-2201
INTRODUCTION AND EXECUTIVE SUMMARY

The Commission should reject Clearwire’s request to deny or condition the merger of AT&T and BellSouth. Clearwire has failed to identify a merger-specific concern or to state a cognizable claim for which a remedy is available.

Clearwire fails to identify any merger-specific concern that would result from combining the wireless holdings of AT&T and BellSouth. AT&T holds no 2.5 GHz spectrum – the entire focus of Clearwire’s pleading. Indeed, the only overlap of any kind in the companies’ wireless holdings resulting from the merger – involving AT&T’s 2.3 GHz spectrum and BellSouth’s 2.5 GHz spectrum – occurs in a portion of a county in rural Indiana that is so small as to be competitively insignificant. Clearwire attempts to manufacture a merger-specific harm by alleging that the combination of AT&T and BellSouth’s 2.3 GHz spectrum will give AT&T a nationwide wireless broadband platform and an incentive to block Clearwire from developing a competing nationwide footprint at 2.5 GHz. But the merged firm’s 2.3 GHz footprint will have significant holes in major markets. Moreover, the Commission found less than a year ago in the Sprint-Nextel Order that efforts to block competition by warehousing 2.5 GHz spectrum are futile due to the competitive state of the mobile data services market.

BellSouth’s 2.5 GHz spectrum holdings pose no barrier to Clearwire’s plans to deploy a nationwide mobile WiMAX service. As an initial matter, the inability to establish a nationwide footprint in a favored spectrum band using preferred technology is not a cognizable competitive harm. However, even if Clearwire were ready to deploy nationwide mobile WiMax today – and there is no reason to believe it is, given that it has not deployed mobile WiMAX in a single market – it has a myriad of options available to
do so regardless of whether AT&T acquires BellSouth’s 2.5 GHz spectrum. Clearwire self-identifies Atlanta as one of its “worst case” markets, despite the fact that BellSouth’s 2.5 GHz holdings in the Atlanta BTA are below the levels that the FCC accepted in twenty-six markets in the Sprint Nextel merger – a merger Clearwire supported. But even in Atlanta, adequate 2.5 GHz spectrum is available for Clearwire to launch mobile WiMAX service. Clearwire’s contrary argument is based on an overstatement of its spectrum requirements and an understatement of the capabilities of WiMax technology. Moreover, if 2.5 GHz spectrum were not available in particular markets, Clearwire still could establish a nationwide footprint by obtaining spectrum in other bands, making multiband/multimode devices, deploying alternative network topologies and/or offering a “roaming-only” service.

Accordingly, the Commission should reject Clearwire’s request for denial or divestiture and grant the Merger Application promptly and without any conditions.
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JOINT EX PARTE OF AT&T INC. AND BELLSouth CORPORATION

AT&T and BellSouth hereby respond to the June 27, 2006, Reply of Clearwire Corporation (“Clearwire”).¹ The Reply requests that the Commission deny the Merger Application or, in the alternative, condition any grant on a pre-consummation divestiture of BellSouth’s licenses and leasehold interests in the 2.5 GHz band. Clearwire, however, has provided no basis for such a denial or divestiture. Consistent with the Commission’s findings in the Sprint-Nextel Order, when Clearwire is ready to offer mobile WiMax service – and it has yet to do so in any market, much less on a nationwide basis – it will have “substantial opportunities” to do so “over numerous spectrum blocks.”²

¹ Reply of Clearwire Corporation to Joint Opposition of AT&T Inc. and BellSouth Corporation to Petitions to Deny and Reply to Comments, WC Docket No. 06-74 (filed June 27, 2006) (“Reply”).

² Applications of Nextel Communications, Inc. and Sprint Corporation For Consent to Transfer Control of Licenses and Authorizations, Memorandum Opinion and Order, 20 FCC Rcd 13967, ¶ 156 (2005) (“Sprint-Nextel Order”).
Accordingly, the Commission should reject Clearwire’s request for denial or divestiture and grant the Merger Application promptly and without any conditions.

I. CLEARWIRE FAILS TO IDENTIFY ANY MERGER-SPECIFIC CONCERN.

Clearwire labors mightily to find some theory to support its desire for spectrum divestitures. But the inarguable fact is that the proposed merger will not materially increase the concentration of spectrum holdings anywhere. Clearwire’s attempt to manufacture a linkage to the merger is based solely on the assertion that the merged firm will have a nationwide 2.3 GHz platform and therefore an alleged incentive to block Clearwire from obtaining a similar nationwide footprint at 2.5 GHz. This claim not only is factually wrong, but of no consequence, as the FCC has previously concluded that any such blocking strategy would be futile because there are numerous spectrum bands that can support wireless broadband operations. Accordingly, Clearwire’s requests for denial or divestiture should be dismissed for failure to identify a merger-specific concern.

A. The Merger Does Not Increase The Concentration Of Spectrum Holdings Anywhere.

There is no material overlap anywhere in the merging parties’ holdings of spectrum suitable for mobile wireless broadband service. First, AT&T does not hold any of the 2.5 GHz spectrum that Clearwire is requesting to be divested. The merged firm will have no more 2.5 GHz spectrum than BellSouth holds today. Moreover, there is only one area of de minimis geographic overlap between AT&T’s 2.3 GHz and

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3 Response of AT&T Inc. to Initial Information and Document Request Dated June 23, 2006, WC Docket No. 06-74, at 55 (Response to Question 23(a)) (filed July 11, 2006) (“AT&T Data Request Response”).
BellSouth’s 2.5 GHz holdings. As the map attached as Exhibit 1 demonstrates, this area is so small as to be competitively insignificant.\(^4\) Accordingly, Clearwire’s complaint about the competitive impact of BellSouth’s 2.5 GHz holdings is neither related to the combination of those holdings with AT&T’s wireless spectrum nor germane to this merger proceeding.

**B. Clearwire Fails In Its Effort To Manufacture A Merger-Specific Issue.**

Clearwire’s theory of how the combination of AT&T and BellSouth’s wireless holdings will produce competitive harm is both factually inaccurate and illogical. Clearwire attempts to manufacture a merger-specific issue by claiming that the merger will give AT&T a nationwide wireless broadband platform at 2.3 GHz\(^5\) and the alleged incentive to block a competitor’s development of a nationwide footprint at 2.5 GHz.\(^6\)

\(^4\) See Ex. 1 – BellSouth/AT&T Overlap Areas. The sole area in question is in only a portion of a single county in Indiana RSA 8. In this one area, AT&T holds one 5 MHz WCS license and BellSouth holds BRS/EBS spectrum in the parts of the southeastern corner of Orange County, Indiana, that are located within 35 miles of 38.173611° North, 85.913889° West. Response of BellSouth Corporation to Information and Document Request Dated June 23, 2006, WC Docket No. 06-74, at 47 (Response to Question 23(b)) (filed July 11, 2006) (“BellSouth Data Request Response”); AT&T Data Request Response at 55 (Response to Question 23(b)).

\(^5\) Reply at 4.

\(^6\) Petition to Deny or, in the Alternative, to Condition Consent, Clearwire Corporation, WC Docket No. 06-74, at 2-3, 8-9, 14-15, 17 (filed June 5, 2006) (“Petition”) (“AT&T will have an incentive to warehouse or otherwise use spectrum at 2.5 GHz to avoid losing business in the services that would ride on broadband platforms”); Reply at iv-iv, 19-20 (“AT&T will have powerful incentives to use the 2.5 GHz band spectrum so that it will not be available to be part of a nationwide mobile broadband network. Every indication it offers is that to the extent it uses these concentrations of spectrum, it will do so inefficiently to avoid cannibalizing the offerings from the multiple overlapping broadband networks it will control”).
The theory suffers two infirmities.

First, Clearwire’s assertion that the merger will give AT&T a nationwide 2.3 GHz platform is factually incorrect. As is clear from AT&T and BellSouth’s responses to the FCC’s data request, the merged firm will not have 2.3 GHz spectrum in New York, Philadelphia, Dallas-Fort Worth or San Antonio, among other places. Following Clearwire’s own reasoning that its need for BRS spectrum in Atlanta and several other small areas will prevent it from establishing a nationwide 2.5 GHz platform, AT&T’s lack of 2.3 GHz spectrum in such key markets as New York and Dallas would prevent it too from competing nationally with its 2.3 GHz holdings.

In addition, in many areas where the combined AT&T/BellSouth will have spectrum, its holdings will only be 10 MHz or less of useable 2.3 GHz spectrum. This is due to the prevalence of C and D block licenses among the combined firm’s WCS holdings. The merged entity’s operations in the C and D blocks will experience significant interference from Satellite Digital Audio Radio Service (“SDARS”) terrestrial services.

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7 AT&T Data Request Response at Ex. 23.1; BellSouth Data Request Response at Ex. 23.a.1.
8 Reply at 5 (AT&T “will have enough 2.5 GHz spectrum in key locations, such as Atlanta . . . to keep such a [mobile broadband platform that it didn’t control] from reaching key markets required to be a national platform”).
9 AT&T Data Request Response at Ex. 23.1; BellSouth Data Request Response at Ex. 23.a.1. Clearwire implicitly concedes that the relevant measure is the amount of useable spectrum, rather than the amount of licensed spectrum, by adding to its stated spectrum requirement of six 2.5 GHz channels in every market the qualifier that each of those channels must contain “at least 5.5 MHz”. Decl. of Perry S. Satterlee ¶ 11 (attached as Ex. 1.00 to Petition) (“Satterlee Decl.”).
10 See AT&T Data Request Response at Ex. 23.1; BellSouth Data Request Response at Ex. 23.a.1 (laying out AT&T’s and BellSouth’s WCS spectrum holdings by license).
repeaters. This interference is particularly problematic in urban, downtown areas where there are numerous SDARS repeaters to address poor direct satellite reception caused by tall buildings. As a result, the merged company will have less than 10 MHz of useable WCS spectrum in Baltimore, Boston, Buffalo, Cleveland, Detroit, Indianapolis, Jacksonville, Memphis, Milwaukee, Minneapolis-St. Paul, New Orleans, and Washington, D.C.\textsuperscript{11} Clearwire, in contrast, has argued that 36 MHz of spectrum is required to offer an economically viable mobile data service.\textsuperscript{12}

Second, in the course of approving a merger involving the combination of the two largest 2.5 GHz spectrum holders, the FCC rejected as implausible the very blocking argument Clearwire advances here. In the \textit{Sprint-Nextel Order}, the Commission concluded that any attempt to impede mobile data services competition by warehousing 2.5 GHz spectrum would be futile because the market for mobile data services is competitive.\textsuperscript{13} After considering a laundry list of 2.5 GHz-related competitive concerns raised by petitioners opposing the Sprint-Nextel merger, including warehousing, the Commission concluded that “[w]e do not find petitioner’s claims persuasive”\textsuperscript{14} and added:

\begin{quote}
We believe that the interconnected mobile data services market will remain competitive post-transaction and that significant competition will continue to
\end{quote}

\textsuperscript{11} See AT&T Data Request Response at Ex. 23.1; BellSouth Data Request Response at Ex. 23.a.1.

\textsuperscript{12} See Petition at 5 n.11; Satterlee Decl., ¶ 11; Reply at 7 n.17 (providing that “six 6 MHz channels [are necessary] in order to achieve commercial viability of a WiMax-capable mobile wireless broadband access service”).

\textsuperscript{13} \textit{Sprint-Nextel Order}, ¶ 156.

\textsuperscript{14} \textit{Id.}, ¶¶ 153 & 156.
grow from existing CMRS providers . . . there is meaningful competition among current mobile data service providers and . . . substantial opportunities exist for service providers to develop and offer even higher speed services over numerous spectrum blocks that will become available in the future.15

Given the Commission’s prior conclusion on the futility of blocking and warehousing strategies at 2.5 GHz, the Commission should dismiss Clearwire’s demands.

II. CLEARWIRE FAILS TO IDENTIFY HARM IN THE RELEVANT MOBILE DATA SERVICES MARKET.

While Clearwire attempts to re-define the market at issue, it fails to demonstrate competitive harm resulting from the merger in the mobile data services market, which is the relevant market for purposes of the FCC’s inquiry.16 Clearwire endeavors to establish competitive harm in the 2.5 GHz nationwide mobile WiMax market by arguing that “it is the 2.5 GHz spectrum band in which Clearwire operates which provides AT&T with the ability to obstruct a nationwide WiMax-capable mobile broadband platform.”17 However, that market does not exist, as the Commission has never recognized 2.5 GHz WiMax services as a relevant market and, in fact, refused to define 2.5 GHz as a market in the Sprint-Nextel Order. In that proceeding, petitioners contended that the combination of Sprint and Nextel’s 2.5 GHz holdings would “create excessive concentration in a unique spectrum resource that could allow Sprint Nextel to develop

15 Id., ¶ 156. While Sprint Nextel voluntarily committed to certain 2.5 GHz build-out benchmarks, that commitment was not linked to any finding of competitive harm. Id., ¶¶ 163-165.

16 The mobile data services market is the relevant market for purposes of assessing Clearwire’s claims, which are predicated on Clearwire’s need for a nationwide footprint to enable a mobile broadband offering.

17 Reply at 9.
market power in yet to be developed markets”18 and that “broadband services in the 2.5 GHz band constitute a separate mobile, broadband data service.”19 The Commission rejected this analysis, noting that “the uncertainty concerning when and what types of new services will be provided using [2.5 GHz] spectrum” made it “neither prudent nor possible to define precise relevant product or geographic markets.”20 The Commission further found that 2.5 GHz was not “uniquely suitable”21 or “intrinsically superior to other spectrum”22 for the provision of wireless broadband. Instead, the Commission considered 2.5 GHz spectrum as an input in “the two existing relevant product markets where [2.5 GHz spectrum] seems most likely to be used: (1) the mobile data services market, and (2) the fixed broadband services market.”23

Upon reviewing both markets, the Commission further found that no competitive harm was likely to result even where the merged firm would hold far more 2.5 GHz spectrum than is at issue here. Indeed, the Commission’s list of reasons why the Sprint-Nextel merger would not result in competitive harm – particularly in the mobile data services market, the relevant market in which to evaluate Clearwire’s future mobile WiMax offering – applies to this transaction as well:

• “The holdings of the applicants do not generally overlap, and the merger

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18 *Sprint-Nextel Order*, ¶ 149.

19 Id., ¶ 155.

20 Id., ¶ 150.

21 Id., ¶ 151.

22 Id., ¶ 157.

23 Id., ¶ 150.
would thus not increase concentration in most local markets.”

- “Substantial amounts of 2.5 GHz spectrum remain for other competitors.”
- “[The merged firm] will have strong, nationwide competitors with sufficient spectrum outside the 2.5 GHz band and powerful incentives to compete in all the potentially relevant product markets.”
- “The 2.5 GHz band does not appear to be a uniquely suitable input for any specific market.”
- “The degree and type of concentration resulting here is consistent with the policies reflected in the rules governing the auction and transfer of this particular spectrum.”
- “The onset of competitors’ needs for additional spectrum will generally align with the arrival of suitable spectrum in future auctions, including those for Advanced Wireless Services (AWS).”

As mentioned previously, the Commission further concluded that “the interconnected mobile data services market will remain competitive post-transaction and that significant competition will continue to grow from existing CMRS providers.” Despite Clearwire’s attempts to manufacture a different result, nothing has changed in the marketplace in the few short months since the Commission reached these conclusions to support a different, much less the exact opposite, result here.

In the face of a flat finding of a competitive mobile data services market, Clearwire attempts – and fails – to demonstrate that the competitive circumstances in the mobile data services market have changed in the eleven months since the *Sprint-Nextel Order*, which, according to Clearwire, warrants new conclusions about competition in

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24 *Id.*, ¶ 151.
25 *Id.*, ¶ 156.
this market. First, although Clearwire argues that WiMax now has “substantial commercial acceptance” and that “full mobility is coming soon,” this argument is irrelevant because Clearwire does not offer mobile WiMax and, indeed, offers fixed pre-WiMax broadband service only in limited areas in eleven states. In addition, Clearwire’s newest partners, Intel and Motorola, estimate that mobile WiMAX equipment will not be commercially available until the late-2007 timeframe.

Second, Clearwire’s claim that AT&T is uniquely situated to “effectively warehouse” 2.5 GHz spectrum by purposefully underutilizing its spectrum holdings post-merger is neither new nor unique to AT&T. As discussed above, similar claims were advanced by opponents of the Sprint-Nextel merger and rejected by the Commission.

In short, Clearwire has not shown that changed circumstances in the mobile data services market since the Sprint-Nextel Order warrant revisiting the Commission’s conclusion that the market is competitive and “substantial opportunities exist for service providers to

26 Reply at 10.
27 Id.
29 Tricia Duryee, Clearwire Snags $900 Million from Intel, Motorola; Drops IPO, SEATTLE TIMES, July 6, 2006, available at http://seattletimes.nwsource.com/html/businesstechnology/2003107487_clearwire06.html (noting that Intel “plans to put chips in laptops by the end of 2007” and that Motorola “plans to start building mobile WiMax networks by the second half of [2007]”).
30 Reply at 24.
31 See Sprint-Nextel Order, ¶¶ 153, 156; Section I.B, supra.
develop and offer even higher speed services over numerous spectrum blocks that will become available in the future. ”32

III. CLEARWIRE PROVIDES NO SUPPORT FOR THE ASSERTION THAT IT NEEDS SIX CHANNELS OF 2.5 GHZ SPECTRUM NATIONWIDE TO PROVIDE SERVICE.

Contrary to Clearwire’s claims, the merged company’s retention of BellSouth’s 2.5 GHz spectrum will not impede the emergence of mobile broadband service in that band. As an initial matter, the inability to establish a nationwide footprint in a favored spectrum band using preferred technology is not a cognizable competitive harm.33 Even if it were, sufficient spectrum is available for wireless broadband to be deployed at 2.5 GHz – including in those limited areas where BellSouth holds such spectrum. Clearwire overstates its spectrum requirements and the limitations of its chosen technology. In fact, Clearwire has a myriad of options available for deploying a nationwide mobile broadband service, with or without 2.5 GHz spectrum. Moreover, like other broadband technologies, such as cable modem, DSL, EV-DO and UMTS, wireless broadband in the 2.5 GHz band can be deployed successfully without a nationwide footprint. The deployment of wireless broadband in the 2.5 GHz band is going ahead, even though no carrier has a nationwide footprint in that band, and this deployment will continue, no

32 Sprint-Nextel Order, ¶ 156.

33 See, e.g., Application of Alascom, Inc., AT&T Corporation and Pacific Telecom, Inc., For Transfer of Control of Alascom, Inc. from Pacific Telecom, Inc. to AT&T Corporation and Application of Alascom, Inc. for Review of Authorization to Acquire and Operate a Fiber Optic Cable System Between Alaska and Oregon for the Provision of Interstate Switched and Private Line Services, Order and Authorization, 11 FCC Rcd 732, ¶ 56 (1995) (“[T]he Commission’s statutory responsibility is to protect competition, not competitors”); Tele-Communications, Inc. and Liberty Media Corporation Applications for Consent to Transfer Control of Radio Licenses, Order, 9 FCC Rcd 4783, ¶ 21 (1994) (“It is well established that the ‘public interest’ means the interest as a whole; not the interest of any one individual”).
matter what happens to BellSouth’s 2.5 GHz spectrum.

   A. **Wireless Broadband Can Be Deployed in the 2.5 GHz Band Even Where BellSouth Holds 2.5 GHz Spectrum.**

   Clearwire exaggerates the difficulties that it would have in creating a nationwide footprint – if indeed that really is its business plan. The reality is that WiMax is far more spectrum-efficient and flexible than Clearwire suggests, enabling wireless broadband deployment in the 2.5 GHz band even where BellSouth has significant 2.5 GHz holdings. Moreover, even if no 2.5 GHz spectrum were available in a particular market, Clearwire would have a variety of options for providing wireless broadband service and completing its nationwide footprint.

   Clearwire overstates its own spectrum requirements by understating the capabilities of its chosen technology and ignoring available options to increase spectrum efficiency and access to alternative spectrum. Clearwire insists – without any support – that it must have six 6 MHz BRS channels everywhere for the WiMax technology that it has selected.34 Piecing together Clearwire’s unstated technical assumptions, it may be surmised from information available on the website of Clearwire’s equipment provider – NextNet Wireless (“NextNet”) – that Clearwire intends to deploy sectorized antennas, with a three-sector design,35 and use a 10 MHz channel bandwidth.36 Such a design

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34 See Petition at 5 n.11; Reply at 7 n.17.

35 NextNet “routinely defines systems using omni, three, four or six sector cell configurations.” NextNet Wireless, Inc., The Wireless Truths: When Frequency Reuse Actually Hurts Coverage (attached as Ex. 2 hereto).

would enable the use of two BRS channels per sector, and require six BRS channels for
operation.

While Clearwire may prefer this design, it is certainly not driven by Clearwire’s
choice of WiMax technology, nor does it make the most efficient use of spectrum.
Clearwire’s three-sector design allows each 10 MHz channel (composed of two BRS
channels) to be used once per sector. But documents available on the WiMax Forum’s
website make clear that WiMax is designed to re-use the same channel in each sector of a
three sector system. Accordingly, only 10 MHz – or two BRS channels – is required to
provide mobile WiMax service. Moreover, this conclusion assumes a three-sector
antenna configuration. Even a modest variation from Clearwire’s existing design to use a
four-sector antenna would increase re-use capability and decrease the amount of
spectrum needed for mobile wireless broadband operations. A four-sector antenna design
would allow each 10 MHz channel to be used twice at a single site because of the greater
separation between sectors. This separation allows a single 10 MHz channel to be used
in sectors 1 and 3, provided those sectors are opposite one another rather than adjacent.
The result is that, using a four-sector design, Clearwire could provide wireless broadband
service using only four BRS channels. Indeed, NextNet touts the efficiency of this

cont’d.
(last visited Aug. 2, 2006).

37 WiMAX Forum, Mobile WiMAX – Part I: A Technical Overview and
WiMax supports frequency reuse of one, i.e. all cells/sectors operate on the same
frequency channel to maximize spectral efficiency”).

38 NextNet’s website says that the “frequency re-use pattern” of its wireless
broadband base station is “1:1.” See NextNet Wireless, Inc., Expedience Base Station:
particular configuration,39 and used it in its model wireless broadband deployment for a large urban environment (like Atlanta) in Mexico City.40 While ULS does not provide antenna data for the majority of Clearwire’s BRS licenses, the license for Clearwire’s WHT657 (Seattle, Washington) indicates use of a Stella antenna with a 90° beamwidth, which is consistent with a four sector re-use scheme.

Moreover, there is no technical reason why Clearwire is limited to 2.5 GHz in offering a mobile WiMax broadband service. While Clearwire suggests that 2.3 and 2.5 GHz are its only options for WiMax deployment, that representation is contradicted by publicly available documents of the WiMax Forum. Those documents show that WiMax can operate in paired spectrum designed for Frequency Division Duplex (“FDD”) use as well as unpaired spectrum planned for Time Division Duplex (“TDD”) use.41 In Europe, for example, spectrum envisioned for WiMAX use at 3.4-3.8 GHz is designated

39 See Ex. 2 (“The Expedience System can provide uniform blanket coverage to a metro area, using any four, 6 MHz channels. It . . . enables unlimited frequency reuse with as few as four channels.”); NextNet Wireless, Inc., NextNet Expedience NLOS System Tour: Multi-Cell Architecture Supports Multiple Frequency Reuse Plans (attached as Ex. 2 hereto) (“NextNet’s unique multi-cell, sectorized system architecture typically utilizes a 4-channel set of MMDS spectrum, with each of the 4 (90-degree) sectors occupying one channel”).


for FDD and TDD use. If FDD equipment can be designed for the 3.4-3.8 GHz band in Europe, it also should be possible to modify WiMax for use in domestic FDD spectrum, including the AWS spectrum at 1.7/2.1 GHz. In addition, WiMax supports fixed and portable broadband operations in unlicensed spectrum. Indeed, WiMax can support unlicensed operations at 5 GHz, including the 5.8 GHz band which is designated for unlicensed use in the United States.

Clearwire also fails to consider the possibility of multimode or multiband devices enabling its equipment to support alternative technologies or spectrum bands. Multiple spectrum bands can be used to provide mobile data services and, as we demonstrated in our Joint Opposition to the Petitions to Deny, there is abundant spectrum in such bands. The mixing of technologies is routine for mobile voice services – for many years, there have been mobile telephones that combine such technologies as AMPS, TDMA, GSM, and CDMA. The mixing of bands is also common for mobile voice services – 800 MHz and 1900 MHz (and shortly 1700 MHz and 2100 MHz) for mobile telephones for domestic use, and additional bands for telephones intended for international use. Clearwire offers no explanation as to why mobile data services cannot be similarly

42 Electronic Communications Committee (ECC) within the European Conference of Postal and Telecommunications Administrations (CEPT), ECC Recommendation (04)05: Guidelines for Accommodation and Assignment of Multipoint Fixed Wireless Systems in Frequency Bands 3.4-3.6 GHz and 3.6-3.8 GHz, available at http://www.ero.dk/documentation/docs/doc98/official/Word/REC0405.DOC.

43 Intel Corp., Deploying License-Exempt WiMax Solutions, at 5, Table 2 (2005), available at http://www.intel.com/netcomms/technologies/wimax/306013.pdf (listing the 5 GHz band and frequencies 5.25 to 5.85 GHz as available for WiMax).

44 See Joint Opposition of AT&T Inc. and BellSouth Corporation to Petitions to Deny and Reply to Comments, WC Docket No. 06-74, at 67 (filed June 20, 2006).
adaptable.

Given the flexibility and spectrum efficiency of WiMax, the feasibility of using WiMax in bands other than 2.3 and 2.5 GHz, and the possibility of multimode/multiband devices to support non-WiMax technologies or additional spectrum bands, BellSouth’s 2.5 GHz spectrum holdings pose no obstacle to Clearwire’s objective of deploying a nationwide wireless broadband service. Clearwire holds up Atlanta as the exemplar of a location where BellSouth has “enough 2.5 GHz spectrum” to keep the 2.5 GHz band from becoming “a national platform.” In truth, as the map attached as Exhibit 3 demonstrates, BellSouth’s 2.5 GHz holdings in the Atlanta BTA – 62% of the MHz POPs – are below the levels that the FCC accepted in twenty-six markets in the Sprint Nextel merger. And Clearwire supported that merger. If a competitor’s holding of 62% of the MHz POPs in a BTA is enough to thwart Clearwire’s business plan, its problems

45 Reply at 5.

46 See BTAs in which Sprint/Nextel Holds a Greater Percentage of BRS/EBS MHz/POPs Than BellSouth Does in the Atlanta BTA (attached as Ex. 3 hereto). Sprint Nextel now holds 94% of the MHz POPs in the 2.5 GHz band in the Baltimore BTA, 93% in the Detroit BTA, 89% in the Buffalo BTA, 87% in the Indianapolis BTA, 84% in the San Diego BTA, 82% in the Pittsburgh BTA, 80% in the Columbus BTA, 78% in the Minneapolis BTA, 76% in the San Francisco BTA, 76% in the Providence BTA, 75% in the Oklahoma City BTA, 75% in the Cleveland BTA, 75% in the Milwaukee BTA, 74% in the Chicago BTA, 73% in the Boston BTA, 72% in the Tampa BTA, 71% in the Memphis BTA, 70% in the Seattle BTA, 69% in the St. Louis BTA, 68% in the Kansas City BTA, 68% in the Los Angeles BTA, 66% in the Houston BTA, 65% in the Norfolk BTA, 65% in the Sacramento BTA, 63% in the Nashville BTA, and 63% in the Cincinnati BTA. See Applications of Nextel Communications, Inc., and Sprint Corporation for Consent to Transfer Control of Licenses and Authorizations, ULS File No. 0002031766, et al. at Attachment 1 to Attachment E (filed Feb. 8, 2005).

extend far beyond BellSouth in Atlanta.

Clearwire’s flip-flop aside, the fact that AT&T will have 20 of 33 BRS/EBS channels in Atlanta is not a barrier to Clearwire entering the Atlanta market.\(^{48}\)

Clearwire’s options include:

- Launching WiMax mobile broadband service with a 10 MHz channel bandwidth using two BRS channels;
- Launching WiMax mobile broadband service with a 10 MHz channel bandwidth using a four-sector antenna design and four BRS channels;
- Acquiring alternative spectrum to support TDD WiMax operations, such as 2155-2175 MHz or 3650-3700 MHz (currently non-exclusive licensing, but exclusive-use licensing proposed for the top 50 markets, including Atlanta);\(^{49}\)
- Modifying its equipment to support FDD WiMax and acquiring appropriate spectrum, such as AWS I (1.7/2.1 GHz),\(^ {50}\) AWS II (1915-...)

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\(^{48}\) Clearwire wrongly states that AT&T will have access to 28 of 33 BRS/EBS channels in Atlanta. Reply at 12. The discrepancy likely arises from Clearwire including leased access to the EBS C and G group channels in Atlanta among BellSouth’s spectrum holdings. BellSouth does not currently lease these channels, although it has submitted a bid to lease channels C1-3 and G1-3. BellSouth Data Request Response at Exhibit 25.2.


\(^{50}\) Although Clearwire did not file a short form to participate in the AWS auction, it may nevertheless have access to AWS spectrum through a strategic partnership with a DBS provider applicant. See Diane Mermigas, News Corp., DirecTV take broadband to the Max, HOLLYWOOD REP., July 18, 2006, available at http://www.hollywoodreporter.com/thr/search/article_display.jsp?vnu_content_id=1002840755 (noting that as part of an effort to find “strategic equity partners” for a WiMAX venture, “News Corp. and DirecTV have been in advanced talks with Clearwire . . . DirecTV also has been exploring . . . acquiring its own WiMax spectrum when such rights are auctioned off by the FCC on Aug. 9”); Howard Buskirk, DBS, Cable Poised to Buy Big Chunks of Spectrum in AWS Auction, COMM. DAILY, July 31, 2006, at 1 (“Wireless DBS, a DirecTV and EchoStar joint venture, was tops on the list of the companies buying bidding units to participate in the [AWS] auction, buying 648 million bidding units – which means it in effect will be in a position to bid for many of the licenses offered when the auction starts Aug. 9 and possibly establish a nationwide spectrum footprint”).
1920/1995-2000, 2020-2025/2175-2180) or 700 MHz spectrum;

- Modifying its equipment to support additional wireless broadband technologies – such as EV-DO, HSPA, Flash-OFDM, or TD-CDMA – and additional spectrum bands; or

- Offering a roaming-only service.

Given the myriad of options available even in what Clearwire identifies as a “worst case” market, the Commission should reject Clearwire’s call for regulatory intervention.

B. **Like Other Broadband Technologies, 2.5 GHz Can Be Deployed Successfully Without A Full Nationwide Footprint.**

Other broadband technologies have been successfully deployed, even without a full nationwide footprint, and there is no reason why 2.5 GHz should be any different. The most popular broadband technology as measured by subscribership – cable modem – currently provides no high-speed connections in 43% of US Zip Codes. The second most used broadband technology – ADSL – currently provides no high-speed connections in 18% of US Zip Codes. Yet it is beyond dispute that cable modem service and DSL are viable businesses. The major CMRS carriers, which are starting to deploy EV-DO and UMTS/HSDPA, likewise lack full nationwide footprints. If these other technologies have succeeded without a national footprint, 2.5 GHz mobile wireless broadband should be able to do the same.

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52 *Id.* (showing that zero ADSL providers report high-speed subscribers in 17.9 percent of U.S. Zip Codes).
C. Broadband Access Services Are Being Deployed In The 2.5 GHz Band, Even Though No Carrier Has A Nationwide Footprint.

The deployment of wireless broadband in the 2.5 GHz band is already proceeding, even though no carrier has a nationwide footprint, and this deployment will continue, regardless of what happens to BellSouth’s 2.5 GHz spectrum. Sprint Nextel, which is the largest holder of 2.5 GHz spectrum, has committed itself to an aggressive roll out of service, notwithstanding its lack of a nationwide footprint. And Clearwire, which is the second largest holder of 2.5 GHz spectrum, gives every indication that it will do the same, at least in its pronouncements outside of this docket. Moreover, Clearwire has made clear that its focus is on rural and suburban areas, and not on a full nationwide footprint, which demonstrates that its arguments for needing BellSouth’s 2.5 GHz spectrum are specious.

Sprint Nextel. Sprint Nextel intends to use the 2.5 GHz spectrum to provide what it calls Wireless Interactive Multimedia Services, or WIMS,\textsuperscript{53} which will be a data-centric service, which focuses on “stationary and portable consumer electronic computing-oriented devices.”\textsuperscript{54} WIMS will offer “high-speed, low-latency access to high-quality multimedia content at reasonable prices”\textsuperscript{55} and “enable consumers and business users to interact with high bandwidth applications through visual-centric services, such as video-on-demand, online gaming, document collaboration, and video

\textsuperscript{53} Sprint Nextel Corporation, Annual Report (Form 10-K), at 15 (Mar. 7, 2006).

\textsuperscript{54} Application for Transfer of Control, Nextel Communications, Inc. and Sprint Corporation, WT Docket No. 05-63, at 46 (filed Feb. 8, 2005) (“Sprint/Nextel Application”).

\textsuperscript{55} \textit{Id.} at 47.
conferencing.”56  WIMS is anticipated to be “extraordinarily fast with initial average
downlink throughput rates of 2 Mbps to 4 Mbps.”57

Sprint Nextel has committed to offer service in the 2.5 GHz band to a population
of no less than 15 million Americans by no later than August 2009.58  This deployment
will include areas within a minimum of nine of the nation’s most populous 100 BTAs and
at least one BTA less populous than the nation’s 200th most populous BTA.59  In these
ten BTAs, the deployment will cover at least one-third of each BTA’s population.60  By
August 2011, Sprint Nextel will offer service in the 2.5 GHz band to at least 15 million
more Americans in areas within a minimum of nine additional BTAs in the 100 most
populous BTAs, and at least one additional BTA less populous than the nation’s 200th
most populous BTA.61  In these additional ten BTAs, the deployment will cover at least
one-third of each BTA’s population.62  Sprint Nextel is proceeding with these plans, even
though its footprint in the 2.5 GHz band “will extend to nearly 85% of the pops in the top
100 markets” but no more.63

Sprint Nextel has acknowledged that there could be obstacles that would prevent

56  Id. at 46.
57  Id.
58  Sprint-Nextel Order, ¶ 164.
59  Id.
60  Id.
61  Id., ¶ 165.
62  Id.
63  Sprint/Nextel Application at 47.
it from achieving this deployment – for example, “band reconfiguration delays, the failure of domestic or international standards-setting bodies to agree on technology standards, unforeseen technical impediments, and prolonged international cross-border interference negotiations.” An inability to get full nationwide coverage or obtain control of BellSouth’s BRS/EBS spectrum, however, does not figure on this list.

**Clearwire.** Outside this proceeding, Clearwire has made clear its intention to proceed with its plans to deploy in the 2.5 GHz band a network “designed specifically to support portable, and eventually mobile, wireless broadband services,” and to do so principally in rural and suburban areas rather than in a full nationwide roll out. *The Wall Street Journal* reports that Clearwire is “trying to take a lead role in so-called WiMax technology” and build a “next-generation wireless network,” which *Business Week* says could be complete “in as little as three years’ time.” Clearwire recently secured $900 million in financing from Intel, Motorola and others “to accelerate the development and deployment of portable and mobile WiMax networks.” “Now flush with cash,” *The Economist* says, “Clearwire will buy more spectrum – it already owns more suitable

64 Letter from Lawrence R. Krevor, Nextel Communications, and Vonya B. McCann, Sprint Corporation, to Marlene H. Dortch, FCC, WT Docket No. 05-63 (filed Aug. 2, 2005).

65 Clearwire Corporation, Registration Statement (Form S-1), at 2 (May 11, 2006).


spectrum in America than anybody except Sprint Nextel, a mobile operator – and lots of base stations from Motorola."^{69} Clearwire also has entered into an alliance with AOL that promises to increase subscribership.\(^{70}\)

Clearwire has a “rural and suburban focus,”\(^{71}\) and “has made a name for itself serving rural markets.”\(^{72}\) In these “small, underserved markets,”\(^{73}\) “there is less competition from established carriers, the cellular market is fragmented, and there are many areas lacking significant DSL or cable access.”\(^{74}\)

Clearwire is “amassing new holdings in rural areas.”\(^{75}\) In October 2005, Clearwire agreed to transfer licenses “for nine midmarket cities”\(^{76}\) to Sprint Nextel in return for “spectrum in 61 small, mainly rural, markets.”\(^{77}\) In February 2006, Clearwire

\(^{69}\) *Face Value: Surfing the Airwaves*, ECONOMIST, July 15, 2006, at 66.


\(^{75}\) *Id.*

\(^{76}\) *Id.*

\(^{77}\) *Id.*
acquired Winbeam, which has BRS licenses mostly in rural central Pennsylvania.\(^{78}\) And just last month Clearwire filed as a “proponent” initiating the 2.5 GHz band plan transition in 8 small markets – consistent with its second and third-tier focus.\(^{79}\) Clearwire has acknowledged to the Commission that it is focusing on rural and suburban markets. As Clearwire stated in the public interest statement for the Sprint Nextel license swap:

> This Transaction will strengthen Clearwire as a broadband services competitor in many second tier, third tier and tertiary markets through a significantly expanded 2.5 GHz geographic footprint and spectrum portfolio. Virtually all of the licenses subject to this transaction are for smaller markets where broadband deployment tends to lag behind broadband deployment in more densely populated areas. Through this Transaction, Clearwire will obtain the ability to serve many smaller markets, thereby adding a competitor committed to broadband services.

Clearwire has also stated that among the “competitive strengths [that] enable us to meet the demand for simple, reliable and portable wireless broadband connectivity,” is a “[s]trong [s]pectrum [p]osition.”\(^{80}\)

Clearwire, then, like Sprint Nextel, is going ahead with its wireless broadband plans for the 2.5 GHz band, but its stated focus is on individual secondary and tertiary markets, not a full nationwide deployment. The ultimate disposition of BellSouth’s 2.5 GHz spectrum should have no effect on Clearwire’s plans, and the specter that Clearwire raises of BellSouth’s holdings impeding development of the band is illusory.

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\(^{79}\) Letter from Terri Natoli, Clearwire Corp., to Marlene Dortch, FCC, WT Docket No. 06-136 (filed July 19, 2006) (initiating the 2.5 GHz transition in Cumberland, MD; Ironwood, MI; Marquette, MI; Middlesboro-Harlan, KY; Olean, NY-Bradford, PA; Pottsville, PA; Rocky Mount-Wilson, NC; and Williamsport, PA).

\(^{80}\) Clearwire Corporation, Registration Statement (Form S-1), at 46 (May 11, 2006)
IV. THE MARKET – NOT CLEARWIRE – SHOULD DECIDE THE “HIGHEST AND BEST” USE FOR SPECTRUM.

The Commission should summarily reject Clearwire’s implicit demand that at least six channels of 2.5 GHz spectrum be set aside everywhere in the United States for mobile WiMax service. The Commission has moved away from its former practice of specifying in detail the use of each block of spectrum. Instead, the Commission’s current policy is to permit the fullest possible range of compatible uses for each spectrum block, with the marketplace allowed to determine which uses are most valuable.81 Consistent with that policy, mobile WiMax service is only one of many permissible uses for the 2.5 GHz band.82 Licensees, including BellSouth, are allowed to decide whether they will make some other permissible use of the spectrum such as, for example, DSL fill-in of rural areas that may otherwise have few, if any, alternatives. Such use could well be an efficient outcome in some areas, and the Commission should allow the marketplace to decide.83 Moreover, the Commission has already found that the nascent mobile data services market is highly competitive and competitive opportunities will continue to


82 Amendment of Parts 1, 21, 73, 74 and 101 of the Commission’s Rules to Facilitate the Provision of the Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands, Report and Order, 19 FCC Rcd 14165, ¶¶ 5, 6, 27-67 (2004) (adopting new band plan for 2.5 GHz spectrum that promotes “the economic viability of services in this band by ensuring that the spectrum is as fungible, tradable, and marketable as possible” and providing “licensees with the flexibility to employ the technologies of their choice in the band”).

83 See id., ¶ 6 (adopting new band plan will allow providers flexible use of band “based on marketplace forces”).
become available. Thus, there is no compelling argument or competitive need to designate a portion of the 2.5 GHz spectrum solely for this purpose everywhere in the United States. To the contrary, the 2.5 GHz spectrum should be preserved for a variety of uses so that service providers can explore multiple options in different areas and the market can determine efficient spectrum use.

CONCLUSION

For the foregoing reasons, the Commission should reject Clearwire’s request to deny the Merger Application or condition any grant on the pre-consummation divestiture of BellSouth licenses and leasehold interests in the 2.5 GHz band. Instead, the Commission should grant the Merger Application promptly and without any conditions.

84 Sprint-Nextel Order, ¶ 156.
Respectfully submitted,

BellSouth Corporation

By:  /s/ Marc Gary

Marc Gary
James G. Harralson
Bennett L. Ross
BellSouth Corporation
1155 Peachtree Street, NE
Atlanta, Georgia 30309
Telephone:  (404) 249-2641
Fax:  (404) 24902385

Wiley Rein & Fielding LLP
1776 K Street, NW
Washington, D.C. 20006
Telephone:  (202) 719-7000
Fax:  (202) 719-7049

Axinn, Veltrop & Harkrider LLP
1370 Avenue of the Americas
New York, NY 20019-4602
Telephone:  (212) 728-2200
Fax:  (212) 728-2201

AT&T Inc.

By:  /s/ James D. Ellis

James D. Ellis
Wayne Watts
Gary L. Phillips
AT&T Inc.
175 E. Houston
San Antonio, Texas 78205
Telephone:  (210) 351-3476
Fax:  (210) 351-3257

Arnold & Porter LLP
555 Twelfth Street, NW
Washington, D.C. 20004
Telephone:  (202) 942-6060
Fax:  (202) 942-5999

Crowell & Moring LLP
1001 Pennsylvania Avenue, NW
Washington, D.C. 20004
Telephone:  (202) 624-2500
Fax:  (202) 628-5116

Sidley Austin LLP
1501 K Street, NW
Washington, D.C. 20005
Telephone:  (202) 736-8088
Fax:  (202) 736-8711

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