401 9th Street, NW
Suite 550
Washington, DC 20004
202-654-5900

Ex Parte Communication
Filed Electronically

November 5, 2010

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

Re: 700 MHz Interoperable Broadband Public Safety Network;
WT Docket No. 06-150, PS Docket No. 06-229, GN Docket Nos. 09-47, 09-51, 09-137, RM-11592

Dear Ms. Dortch:

On August 24, 2010 T-Mobile USA, Inc. ("T-Mobile") submitted for inclusion in the record of the above referenced proceedings a white paper, *Technical Analysis of the Proposed 700 MHz D-Block Action* prepared by Professor Dennis Roberson of Roberson and Associates, LLC.[1/] The *White Paper* demonstrated that the public interest would best be served if the Federal Communications Commission ("FCC" or "Commission") licensed by auction the use of the bands 758-763/788-793 MHz (the 700 MHz D Block). On September 17, 2010, AT&T Services, Inc. ("AT&T") submitted a letter responding to the *White Paper*. The AT&T response incorrectly interprets the *White Paper* and otherwise uses erroneous presumptions to assert that an additional 10 megahertz of 700 MHz spectrum is required to meet public safety broadband requirements. The following responds to the AT&T letter.

[1/] Dennis A. Roberson, *Technical Analysis of the Proposed 700 MHz D-Block Auction*, filed as an attachment to Letter from Thomas J. Sugrue, Vice President Government Affairs, T-Mobile USA, Inc., to Marlene H. Dortch, Secretary, FCC, PS Docket 06-229 (Aug. 24, 2010) ("*White Paper*").

An Additional 10 Megahertz of Spectrum is Not Required to Meet Public Safety Needs

AT&T argues that the D Block presents an opportunity to meet current and anticipated public safety needs.[2/] T-Mobile strongly supports first responders, who should have the dedicated spectrum assets necessary to provide critical services to the public. However, in this case, the evidence suggests that the 10 megahertz currently dedicated for public safety broadband communications at 700 MHz – none of which is currently in use –will meet public safety's needs. While public safety must have adequate spectrum resources, it would be contrary to the public interest to dedicate scarce spectrum to inefficient use.

The Commission recently sought comment on additional waiver requests by public safety entities to use the 700 MHz public safety broadband spectrum.[3/] Additionally, the Commission has been receiving quarterly reports from public safety entities that have already received waivers. The responses to those waiver requests and the quarterly reports demonstrate that the construction of a 700 MHz public safety broadband network is not constrained by spectrum, but by funding. Many commenting parties, in response to the Commission's request for comments on the additional waiver requests urged the Commission to allow entities not eligible for licensing under Section 337 of the Communications Act of 1934, as amended (the "Act") – which defines the scope of public safety users – to use the 700 MHz public safety broadband spectrum.[4/] These responses argue that non-public safety licensees, generally entities eligible in the critical infrastructure industries ("CII") (utilities, for example) could help fund construction of a public safety broadband network.[5/] Moreover, many of the public safety entities that have already received waivers acknowledge in their quarterly reports that they failed to receive Broadband Technology Opportunity Funding ("BTOP") grants and

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2/ Letter from Jim Bugel, Assistant Vice President, Public Safety & Homeland Security, AT&T to Marlene H. Dortch, Secretary, FCC, PS Docket No. 06-229 at 1 (Sept. 17, 2010) ("*AT&T Letter*").

3/ *Public Safety and Homeland Security Bureau Seeks Comment on Petitions for Waiver to Deploy 700 MHz Public Safety Broadband Networks*, Public Notice, DA-10-1748 (rel. Sept. 15, 2010); *Public Safety and Homeland Security Bureau Seeks Comment on Additional Petition for Waiver to Deploy 700 MHz Public Safety Broadband Network*, Public Notice, DA-1796 (rel. Sept. 22, 2010).

4/ *See, e.g.*, Comments of the Utilities Telecom Council, PS Docket No. 06-229 at 1 (filed Oct 18, 2010); Comments of the Counties of Calumet, Outagamie, and Winnebago, Wisconsin, PS Docket No. 06-229 at 1 (filed Oct. 18, 2010).

5/ Comments of the Utilities Telecom Council, PS Docket No. 06-229 at 4 (filed Oct 18, 2010) ("[S]haring 700 MHz public safety spectrum can help utilities meet their communications needs for smart grid, and at the same time, can help public safety by leveraging utility resources, including infrastructure and smart grid funding").

that they are now in the process of seeking alternative funding sources.[6/] These responses make it clear that, more than spectrum, public safety entities require funding to enable the deployment of a 700 MHz public safety broadband network.[7/] However, there is no clear path by which funding will be provided. The Federal government is faced with significant deficits[8/] and state and local agencies are cash-strapped.[9/] The *National Broadband Plan* addresses that need by proposing the construction of a public safety broadband network in conjunction with the allocation of D Block spectrum for commercial purposes.[10/]

The recent responses to the public safety 700 MHz broadband waiver requests also propose to permit sharing of the existing 10 megahertz of 700 MHz public safety broadband spectrum with CII-eligible entities and others. If public safety entities are willing to share their existing 10 megahertz of spectrum, it is not clear that they require the additional 10 megahertz of D Block spectrum – particularly if, as the *National Broadband Plan* suggests, the Commission requires the licensee(s) of the D Block spectrum to permit public safety priority access and roaming on the D Block system.

6/ *See, e.g.*, New York City (700MHz. Waiver Recipient) Second Quarterly Report, PS Docket No. 06-229 (filed Oct. 19, 2010); 700 MHz Public Safety Broadband Quarterly Report of the District of Columbia, PS Docket No. 06-229 (filed Oct. 19, 2010); Second Quarterly Report of the City of Pembroke Pines, Florida pursuant to the 700 MHz Waiver Order of the FCC dated May 11, 2010, PS Docket No. 06-229 (filed Oct. 7, 2010); 700 D Block Waiver Recipients Quarterly Report San Antonio Urban Area Security Initiative (SAUASI), PS Docket No. 06-229 (filed Oct. 18, 2010); Second Quarterly Report by 700 MHz Waiver Recipient – Iowa Statewide Interoperable Communications System Board (ISICSB), PS Docket No. 06-229 (filed Oct. 14, 2010); Quarterly Status Report – October 2010, State of Hawaii Broadband Air Interface for Public Safety, PS Docket No. 06-229 (filed Oct. 14, 2010); Second Quarterly Report of the City of Boston, PS Docket No. 06-229 (filed Oct. 14, 2010); Quarterly Status Report of Calumet, Outagamie, and Winnebago Counties of Wisconsin, PS Docket No. 06-229 (filed Oct. 14, 2010).

7/ Indeed, the FCC recently permitted the District of Columbia to delay its required payment to the Public Safety Spectrum Trust ("PSST"), providing further evidence that funding challenges remain for public safety. *Implementation of a Nationwide, Broadband Interoperable Public Safety Network in the 700 MHz Band*, Order, PS Docket No. 06-229 (rel. Oct. 27, 2010).

8/ *See, e.g.*, Corey Boles, *CBO: Federal Government FY10 Budget Deficit Just Less Than $1.3 Trillion*, DOW JONES NEWSWIRES, Oct. 14, 2010, *available at* http://www.nasdaq.com/aspx/stock-market-news-story.aspx?storyid=201010071806dowjonesdjonline000577&title=cbofederal-government-fy10-budget-deficit-just-less-than-13-trillion.

9/ *See, e.g.*, Elizabeth McNichol et al., *States Continue to Feel Recession's Impact*, Center on Budget and Policy Priorities, Oct. 7, 2010, *available at* http://www.cbpp.org/cms/?fa=view&id=71.

10/ *Connecting America: The National Broadband Plan*, Federal Communications Commission (March 2010), at 86, *available at* http://download.broadband.gov/plan/national-broadband-plan.pdf ("*National Broadband Plan*").

AT&T also asserts that Chairman Genachowski and Admiral Barnett, chief of the FCC's Public Safety and Homeland Security Bureau, have stated that public safety entities require additional spectrum.[11/] AT&T twists the facts. Chairman Genachowski has correctly observed that spectrum is the oxygen of the wireless industry and that additional spectrum will be required in the future to meet the needs of this growing and critical sector of our Nation's economy.[12/] The fact that *all* spectrum users will need additional spectrum, however, does not mean that either Chairman Genachowski or Admiral Barnett believe that public safety's needs should be met by allocating the D Block for first responder use now. In fact, the opposite is true. The *National Broadband Plan* – which proposes the auction of D Block spectrum for commercial use – makes it clear that allocation of the D Block to public safety is **not** the way to satisfy long term public safety requirements.[13/] Similarly, Admiral Barnett's recent testimony before the Senate Commerce Committee makes it clear that he too believes that the D Block should not be used to meet future public safety requirements but that it should be allocated for use by commercial providers.[14/]

While AT&T offers vague and conclusory statements regarding public safety's need for additional spectrum, the *White Paper* is based on an extensive FCC study which carefully analyzed public safety needs.[15/] The FCC analysis is the only recent, comprehensive and quantitative evaluation of public safety bandwidth needs. It used specific public safety scenarios derived, in some cases, from actual incidents. Because AT&T offers nothing to demonstrate flaws in these findings, the Commission should reject AT&T's assertion regarding the spectrum needs of public safety systems.

Ten Megahertz of Spectrum is Sufficient to Satisfy Required Transmission Speeds

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11/ *AT&T Letter* at 2.

12/ Remarks of Chairman Julius Genachowski, CTIA Wireless I.T. & Entertainment, San Diego, California at 4 (Oct. 7, 2009), *available at* http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-293891A1.pdf.

13/ *National Broadband Plan* at 316 ("The FCC should quickly license the D block for commercial use, while implementing several requirements for the D block licensee(s) to maximize options for partnerships with public safety").

14/ *Keeping Us Safe: The Need for a Nationwide Public Safety Network: Hearing Before the S. Comm. on Commerce, Science & Transportation*, 111th Cong. (2010) (statement of Ret. Admiral James Barnett, Jr., Chief, Public Safety Bureau, Federal Communications Commission) ("the FCC recommended that public safety be able to roam over to commercial networks with priority access to provide as much as 60 additional megahertz of spectrum. This concept has the additional advantage of providing two or more back-up networks, and therefore much more resiliency and redundancy than we currently have").

15/ *The Public Safety Nationwide Interoperable Broadband Network: A New Model for Capacity, Performance and Cost*, Federal Communications Commission (June 2010) *available at* http://fcc.gov/pshs/docs/releases/DOC-298799A1.pdf.

AT&T argues that the 10 megahertz of existing 700 MHz public safety broadband spectrum will not support sufficient data transfer speeds. It states that "current estimates are that a (10 MHz) 5X5 MHz system would have downlink speeds of between 2.5 and 6 Mbps and uplink speeds of 1 to 2.5 Mbps. Yet, several public safety agencies have demonstrated a need for up to 3 Mbps per camera for fixed and mobile surveillance video from fixed cameras throughout a city to public safety vehicles in the field."[16/] The *White Paper* takes these needs into account in concluding that no additional spectrum is required for a public safety 700 MHz broadband network. The *White Paper's* findings are based on downlink and uplink estimates of 7.5 and 3.5 Mbps, well in excess of the current estimates that AT&T cites.[17/] Moreover, responsible spectrum management would not use 700 MHz for local area on-scene video distribution in any case. Instead, and as discussed more fully below, reasonable spectrum stewardship demands the use of wide-area downlink at 700 MHz with 7.5 Mbps to vehicles, coupled with the use of the band 4940-4990 MHz (the 4.9 GHz band) for wireless local area distribution, providing throughput of 7.5 Mbps to units on-scene.

4.9 GHz is a Responsible Way to Satisfy Part of Public Safety's Requirements

AT&T complains that the *White Paper's* conclusions are "conditioned" on the use of the 4.9 GHz band to "supplement" the 10 megahertz already dedicated for a broadband public safety network at 700 MHz. AT&T misses the point. The *White Paper* reasonably assumes that public safety will use spectrum responsibly and, like all spectrum users, will deploy the spectrum appropriate for its need. Because the use of 700 MHz spectrum for all on-scene communications is, in light of its propagation characteristics, inefficient, the *White Paper* advocates the use of the more efficient 4.9 GHz band for such on-scene communications. Similarly, APCO pointed out, when the FCC was considering the allocation of the 4.9 GHz band for public safety communications, that the 700 MHz band is not ideal for high-speed broadband transmissions over short distances; it is better suited to wide-area radio communications requirements due, in part, to the low authorized transmit power which allows frequency re-use.[18/] Using 700 MHz for these requirements would preclude intense re-use of the spectrum favoring, as Motorola recognized, the use of the 4.9 GHz band for on-scene communications instead.[19/] The *White Paper's* assumption, that 4.9 GHz would be used

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16/ *AT&T Letter* at 1-2.

17/ *White Paper* at 6. Indeed, in a recent presentation to the FCC, AT&T acknowledges that the use of LTE technology will allow acceptable data rates with a 5 megahertz. The Wireless Path Ahead at 12, filed as an attachment to Letter from Joseph P. Marx, Assistant Vice President, AT&T Services Inc. to Marlene H. Dortch, Secretary, FCC, PS Docket No. 06-229 (filed Oct. 25, 2010).

18/ Comments of the Association of Public-Safety Communications Officials – International, Inc., ET Docket No. 98-237 (filed Dec. 18, 2000).

19/ Motorola, *4.9 GHz Allocation to Public Safety: Motorola White Paper for Submission to FCC*, filed as an attachment to Letter from John Lyons, Motorola, to Magalie Roman Salas, Secretary, FCC, WT Docket No. 00-32 (July 31, 2001) ("*Motorola White Paper*").

for local, on-scene coverage, merely reflects the manner – strongly supported by public safety at the time of the allocation – in which the FCC anticipated the band would be deployed.

AT&T asserts that, despite the fact that the 4.9 GHz band is allocated for public safety use, the band is not appropriate to meet public safety needs. The opposite is true. The 4.9 GHz band is being extensively used today[20/] and must be a part of the Commission's assessment of public safety's broadband needs. The *White Paper* does not suggest that all of public safety's broadband needs will be met by using the 4.9 GHz band; only that responsible spectrum management dictates that it should be used as appropriate for on-scene communications needs. For example, the *White Paper* does not contemplate that the 4.9 GHz band should always be used for in-building coverage. As Motorola recognized in its comments in the 4.9 GHz proceeding, the band is optimally used for personal area networks ("PANs"), vehicular area networks ("VANs") and wireless local area networks ("WLANs").[21/] Nevertheless, some building penetration use is possible; the 4.9 GHz band is not dissimilar to frequency bands where WiFi systems routinely operate throughout structures.[22/] While 4.9 GHz is not intended to meet every on-scene need, it can meet many and must be used where appropriate instead of inefficiently using 700 MHz band spectrum.

AT&T also argues that because the 4.9 GHz band has limited range, its use is inappropriate for rural areas. AT&T misses the point again. The *White Paper* does not assume any use of the 4.9 GHz band for wide-area coverage buildout in either urban or rural areas. Instead, the *White Paper* anticipates that the band would be used primarily for on-scene communications. When it allocated the band for public safety operations, the FCC did not expect that the band would be primarily used for point-to-point operations, although there is limited use of the band today for that purpose.[23/] Therefore, while the band can be used for backhaul if needed,[24/] its utility for long-range

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[20/] Andrew Seybold, *Response to Roberson and Associates, LLC white paper, Technical Analysis of the Proposed 700 MHz D-Block, dated August 23, 2010, contracted for by T-Mobile USA, Inc.*, filed as an attachment to Letter from Andrew Seybold, CEO and Principal Analyst, Andrew Seybold, Inc., to Marlene H. Dortch, Secretary, FCC, WT Docket No. 06-150 (Sept. 10, 2010).

[21/] *Motorola White Paper* at 26.

[22/] H. Okamato et al., *Outdoor-to-Indoor Propagation Loss Prediction in the 800 MHz to 8 GHz Band for an Urban Area*, VEHICULAR TECHNOLOGY, Vol. 58 No. 3 at 1059-1067 (March 2009).

[23/] *The 4.9 GHz Band Transferred from Federal Government Use*, Second Report and Order and Further Notice of Proposed Rulemaking, 17 FCC Rcd 3955 (2002) (allocating 50 megahertz of spectrum in the 4.9 GHz band for use in support of public safety).

[24/] N. La Sorte et al., *Performance Evaluation of a Deployed WiMAX System Operating in 4.9 GHz Public Safety Band*, Consumer Communications and Networking Conference 2009, 6th IEEE, at 1-5, 10-13 (Jan. 2009).

communications in rural areas is irrelevant. While the use of the 4.9 GHz band for on-scene communications will likely create additional backhaul requirements, the need to use backhaul in connection with 4.9 GHz on-scene communications is preferable to the inefficient use of 700 MHz spectrum for that purpose.

Even though AT&T argues that the use of the 4.9 GHz band is not appropriate to meet public safety broadband needs, it contradicts itself by asserting that the band is too crowded and that multiple jurisdictions can use the band at the same location, resulting in lack of accessibility to the band.[25/] The current use of the band is evidence that it is appropriate for public safety. Even though the band is already employed, it can continue to support on-scene communications by multiple entities. As Motorola has pointed out, the 4.9 GHz band can be re-used multiple times in a city.[26/] In fact, Motorola's analysis shows that different functions can be performed at a single scene using the 50 megahertz of spectrum at 4.9 GHz.[27/] The fact that the band can be intensely used throughout a city demonstrates that multiple agencies can use this spectrum. Although, as evidenced by current use, the band can be used without coordination among entities, the Commission permitted the creation of regional plans for use of the 4.9 GHz band and directed each 700 MHz regional planning committee to consider coordination procedures for the band.[28/] Therefore, the current use of the 4.9 GHz band does not preclude its future as an integral part of a public safety broadband network.

AT&T cites the City of Boston's alleged concerns that the 4.9 GHz band suffers from a lack of technical standards and absence of regional planning.[29/] However, the FCC considered both of these matters and, after input from manufacturers and the public safety community, crafted rules designed to maximize the use of the 4.9 GHz band. In particular, the Commission rejected the imposition of equipment standards because of the variety of devices that would be used in the band – the imposition of equipment standards could unnecessarily restrict devices that could be used in the band.[30/] The argument that the 4.9 GHz band is unattractive for public safety because devices are not on a common equipment platform belies a misunderstanding of how those devices are used. As noted above, 4.9 GHz band devices need not be part of an interoperable network; they are

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25/ AT&T Letter at 2.

26/ *Motorola White Paper* at 17.

27/ *Id.*

28/ *The 4.9 GHz Band Transferred from Federal Government Use*, Memorandum Opinion and Order and Third Report and Order, 18 FCC Rcd 9152 ¶ 40 (2003) (directing each 700 MHz regional planning committee to consider coordination procedures for the 4.9 GHz band).

29/ AT&T Letter at 2-3.

30/ *The 4.9 GHz Band Transferred from Federal Government Use*, Memorandum Opinion and Order, 19 FCC Rcd 22325 ¶ 16 (2004) (declining to adopt interoperability technical standards in the 4.9 GHz band because the band is likely to be used for a variety of services that do not lend themselves to standardization).

optimized to offload local area traffic from the 700 MHz network when wide-area coverage is not required.

The Nature of a Dense Buildout

The *White Paper* demonstrates that public safety would be provided with a far superior network if it cooperates with a commercial provider to construct a densely deployed (low tower/low power) system using 10 megahertz of spectrum. AT&T argues that more spectrum is needed to build the non-dense system architecture similar to what public safety currently employs.[31/] While AT&T's general proposition – that more spectrum is required for a less densely built network – is true, its presumption envisions a less efficient system design. If a denser network is built, less spectrum would be required. As demonstrated below, a more densely built network would feature additional advantages, in addition to being more spectrally efficient.

AT&T argues the obvious that a denser network could result in higher capital expenses and operating expenses than a less-dense, but less efficient network.[32/] However, it fails to note that in a lower-cost, lower-efficiency network, public safety – and ultimately taxpayers – would bear the entire capital and operational expenses. In a shared, more-dense and more spectrum efficient network those costs would be shared by public safety and commercial entities. Moreover, despite the fact that the more densely built network would use half the amount of spectrum as the less-densely built network, a 10 megahertz network would have *greater* overall capacity because of frequency re-use. In addition to providing greater overall capacity and the ability to accommodate more incidents with applications such as video, the cooperative use of a commercial network would feature higher redundancy and reliability than a system with fewer cell sites; if one cell site became disabled, nearby cell sites would be able to provide service. In a less densely built system, when a transmitter site becomes disabled, coverage to the area is often completely lost. Moreover, all those additional cell sites, each with commercial capacity, would enhance public safety's ability to secure priority access and roaming on a commercial system. Whenever public safety spectrum is fully utilized, the commercial spectrum could be available at the same or nearby locations to support public safety requirements on a priority basis. Of course, the cooperative use of a commercial network would not foreclose public safety from constructing sites of its own in those limited instances where a commercial system does not provide coverage.

AT&T's argument also ignores the significant long-term cost benefits to public safety by partnering with a commercial provider. In a stand-alone public safety system, handsets will be developed that will be used only on public safety systems, perpetuating the currently dysfunctional public safety equipment marketplace in which user devices are dramatically more expensive and less feature-rich than those available in the

31/ AT&T Letter at 2-3.

32/ AT&T Letter at 3.

commercial/consumer market. By cooperating with a commercial provider, public safety can take advantage of economies of scope and scale, resulting in the availability of less costly, state-of-the art handsets, which will save public safety, and ultimately taxpayers, scare resources over time.

Narrowband Channels

As part of responsible spectrum management, and in order to satisfy any perceived need for additional broadband capacity at 700 MHz, the *White Paper* recommends that the Commission evaluate whether spectrum currently designated for 700 MHz public safety narrowband use can be dedicated for broadband operations.[33/] The *White Paper* is not alone in this recommendation. Even proposed legislation that would reallocate the D Block to public safety would allow flexible use of the 700 MHz narrowband spectrum.[34/] AT&T disagrees, asserting that narrowband channels should not be converted to broadband use.[35/] AT&T mischaracterizes the *White Paper's* recommendation by inferring that T-Mobile believes that public safety has no narrowband voice requirements. To the contrary, the *White Paper* recognizes the continued need for narrowband voice channels for off-network talk-around communications and does not advocate repurposing all narrowband voice 700 MHz channels exclusively for broadband operations. Instead, the *White Paper* asserts that current 700 MHz narrowband spectrum could be transitioned into an integrated voice and data network. Currently, two networks at 700 MHz are contemplated – a narrowband voice and a broadband data network. It would be most efficient if only a single network were constructed now – one that could accommodate broadband voice and data, with narrowband capacity available off-network. If this most efficient option is not pursued immediately, then it should be investigated over time, so that some or all of the valuable and useful narrowband voice capacity could be used in the future in an integrated voice and data broadband network.

The *White Paper's* proposal, which would add 10 megahertz for voice over broadband to the 10 megahertz now designated for broadband data while reserving 2 megahertz for narrowband voice, would still produce 160 duplex channels for narrowband voice. In addition to these 160 channels that could be used on a nationwide interoperable basis for narrowband voice operations, there are nearly 600 channels in the bands 800 MHz and below, after band reconfiguration and rebanding, that can still be used for narrowband voice operations on local and regional bases, without the need to maintain a separate narrowband 700 MHz voice network. This narrowband voice capacity is a significant increase over the 264 narrowband voice channels available today (not including the frequencies available below 450 MHz). The *White Paper*

33/ *White Paper* at 13.

34/ Public Safety Spectrum and Wireless Innovation Act, S. 3756, 111th Cong. at Sec. 103 (2010) (allowing for flexible use of narrowband spectrum).

35/ *AT&T Letter* at 3.

contemplates the use of integrated handsets that would accommodate both the 700 MHz broadband and narrowband operations, with on-network communications using broadband capacity and off-network communications using narrowband capacity.

Interference

AT&T asserts that use of the D Block spectrum by a commercial entity would cause harmful interference to public safety operations and that re-allocation of the D Block to public safety is necessary to avoid that interference.[36/] The *National Broadband Plan* notes that interference between a commercial system and an adjacent public safety would be eliminated by using collocated, low-tower sites.[37/] However, collocation is not required to reduce adjacent band interference. Instead, construction of a public safety system with a densely built architecture – as the *White Paper* recommends – will, in addition to producing the many benefits noted above, significantly reduce the potential for adjacent band interference. Collocation, where appropriate, would further reduce that risk. Moreover, the LTE air interface that both public safety and an adjacent commercial network will use is designed to allow broadband networks to operate in adjacent spectrum without guardbands, further ensuring that there will be no interference between the public safety and commercial networks.

The proposed use of the D Block for commercial purposes, in a band adjacent to public safety operations, is not new. It is a feature of the current 700 MHz band plan, on which AT&T previously commented without objection. The position or proposed use of the D Block has not changed. AT&T's untimely objection to the FCC's past decision is directed to preventing any additional competition in the 700 MHz band, not avoiding interference to public safety networks.

Public Safety Spectrum Needs

Finally, AT&T asserts that an additional 10 megahertz should be dedicated for public safety broadband spectrum because public safety needs have been underestimated.[38/] However, other than vague assertions, AT&T does not demonstrate why the FCC's thorough and comprehensive analyses of public safety's spectrum needs are inaccurate. Nor do AT&T's assertions take into consideration the optimum use of the 700 MHz band – a densely built system with frequency re-use which permits public safety priority access and roaming on commercial systems.

The FCC's Office of Broadband Initiative, consistent with the findings of the *National Broadband Plan*, recently demonstrated the need for additional broadband

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36/ *AT&T Letter* at 4.

37/ *National Broadband Plan* at 318.

38/ *AT&T Letter* at 4.

spectrum.[39/] The *OBI Technical Paper* did not identify public safety as having broadband needs that are more severe than other spectrum users. T-Mobile strongly supports the FCC's efforts to make additional spectrum available for wireless services and broadband applications in particular. Like other spectrum users, public safety will benefit from the allocation of that additional spectrum in the future. However, the acknowledged need for additional spectrum across all services does not justify reallocating and dedicating the D Block for public safety today. Instead, the techniques discussed above – frequency re-use, priority access and roaming, LTE architecture – will all provide public safety with ample wireless broadband capacity for years to come, until additional spectrum resources are made available for all spectrum users. T-Mobile strongly supports the satisfaction of public safety's spectrum needs which, the *White Paper* demonstrates, can best be satisfied by the spectrum sharing techniques proposed for the 700 MHz D Block in the *National Broadband Plan*.

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We look forward to continuing to work with the FCC on these matters. If there are questions regarding T-Mobile's position, please contact the undersigned directly.

/s/ Kathleen O'Brien Ham

Kathleen O'Brien Ham
Vice President,
Federal Regulatory Affairs

/s/ Dennis Roberson

Dennis Roberson
Ken Zdunek

ROBERSON AND ASSOCIATES
10 West 35th St - 10F8-1
Chicago, IL 60616
847 414 4900

Consultants to T-Mobile USA, Inc.

39/ *Mobile Broadband: The Benefits of Additional Spectrum, OBI Technical Paper Series,* Federal Communications Commission (Oct. 2010) *available at* http://orbitrax.com/wp-content/uploads/2010/10/fcc-omnibus-broadband-initiative-obi-technical-paper-mobile-broadband-benefits-of-additional-spectrum.pdf.

cc: (by e-mail)

James A. Barnett, Jr
Stuart Benjamin
Jeff Cohen
Paul de Sa
David Furth
Angela Giancarlo
John Giusti
Jeff Goldthorp
Nese Guendelsberger
Rick Kaplan
Julius Knapp
Evan R. Kwerel
John Leibovitz
Jennifer Manner
Charles Mathis
Nicole McGinnis
Ruth Milkman
Paul Murray
Louis Peraertz
Tom Peters
James Schlichting
Susan Singer
Walter Strack
Joel Taubenblatt
Peter Trachtenberg
Margaret Wiener