

WRITTEN STATEMENT

of

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before the

**HOUSE SUBCOMMITTEE ON COMMUNICATIONS, TECHNOLOGY,
AND THE INTERNET**

Legislative hearing on a discussion draft to provide funding for the construction and maintenance of a nationwide, interoperable public safety broadband network and for other purposes and on H.R. 4829, the “Next Generation 9-1-1 Preservation Act of 2010”

June 17, 2010

INTRODUCTION

Good morning Chairman Boucher, Chairman Waxman, Ranking Member Barton, Ranking Member Stearns and members of the Subcommittee. Thank you for the opportunity to appear before you today. My name is Joe Hanley and I am Vice President - Technology Planning and Services for Telephone and Data Systems, Inc., which is the parent company of United States Cellular Corporation.

U.S. Cellular is the sixth largest mobile operator in the U.S., serving over 6 million customers in rural, suburban, and urban markets in twenty-six states. We are members of the Rural Cellular Association (“RCA”), as well as CTIA – The Wireless Association. We provide award-winning call quality, as recognized in nine consecutive J.D. Power awards for highest call quality in the North Central Region. U.S. Cellular operates as part of a national interoperable network today. We offer national service plans through roaming arrangements with other carriers, we coordinate call handoffs with many neighboring carriers, and our engineers contribute to industry standards work.

U.S. Cellular’s networks serve public safety needs as well as the needs of consumers and businesses. Hundreds of state and local public safety agencies subscribe to our services, we have deployed E911 service to over 1,000 PSAPs, and we participate in the Wireless AMBER Alerts Initiative.

Our commitment to meeting customers’ needs includes the on-going deployment of cell towers and advanced technologies to provide voice and broadband services to many previously unserved and underserved areas. Our aggressive investments in third-generation broadband networks already reach about 75 percent of our post-pay customers. Like other wireless carriers, U.S. Cellular seeks additional spectrum to facilitate its deployment of fourth-generation broadband services.

I am pleased to be here today in order to offer testimony in support of the Committee’s legislative proposal to auction the D Block and use the proceeds to fund a nationwide, interoperable mobile broadband network. A commercial auction of reasonably-sized D Block licenses followed by negotiated public/private partnerships will help meet both public safety and commercial broadband goals for the spectrum in the 700 MHz Public Safety Broadband Licensee

(PSBL) and D Blocks. Properly designed, I believe this approach provides the fastest path to needed services for public safety and economic growth; manageable roles for government, public safety agencies and commercial operators; and the lowest possible burden on taxpayers.

U.S. Cellular is prepared to play a significant role by bidding on D Block area licenses and, if successful, establishing public safety partnerships, constructing regional shared networks and operating parts of an interoperable broadband network meeting the needs of public safety. If public safety entities choose other options, then U.S. Cellular will construct and operate commercial networks that bring broadband services to consumers and increase competition.

Future competition in broadband services depends on making this spectrum available to consumers through a variety of commercial operators. Moreover, the D Block auction with smaller area licenses will attract active bidding and substantial revenues that the legislative proposal will direct to the construction and maintenance of the public safety network. Due to the nature of the build-out requirements, it will also ensure that more rural communities will see the needed infrastructure will be deployed more quickly. At the same time, this framework would allow for shared networks, which we continue to believe will benefit public safety agencies through economies in network infrastructure and operations, while ensuring that capacity, coverage and quality are available to public safety, especially in emergencies. The National Broadband Plan also proposes a broader roaming and priority access obligation which we support and would further augment the capacity available to public safety.

The federal government must not continue to leave this valuable spectrum idle. A commercial auction of the D Block with an obligation for 700 MHz licensees to provide roaming access to public safety along with the option of public/private partnerships is the best path forward. With reasonably-sized license areas, widely-accepted technical conditions and transparent bidding procedures, the commercial auction will lead to competitive broadband services and the strongest implementation of public safety services. Congress should promote vigorous competition in the D Block auction and commercial services, and provide funding for the construction of the public safety broadband network, encouraging public safety and commercial licensees to form partnerships whenever possible.

The legislative draft also proposes to pair spectrum between 2155 and 2180 MHz with new commercial spectrum between 1675 and 1710 MHz. The FCC would be required to auction this spectrum by January 31, 2013. The FCC's Office of Engineering and Technology recently issued a public notice requesting comment on the feasibility of commercial operations in these frequencies. The record in this proceeding will help the FCC and the NTIA determine the best way to move forward with the directive proposed in the legislation. U.S. Cellular applauds the Committee for including this spectrum in its draft legislation and for proposing that the proceeds of this second auction also be directed toward the public safety broadband.

PUBLIC POLICY GOALS FOR THE D BLOCK AUCTION AND PUBLIC SAFETY BROADBAND

I commend you for holding this hearing to examine the important question of how to move forward with the National Broadband Plan's public safety and spectrum proposals and the draft legislation before the Committee. U.S. Cellular believes that there are two fundamental goals we should seek to leverage from the use of spectrum in the 700 MHz PSBL and D Blocks. Both goals are essential to the public interest and are supported by the proposals in the National Broadband Plan and the Committee's bi-partisan discussion draft.

One goal is to provide nationwide interoperable mobile broadband services for public safety uses. These services are critical and must be made available throughout the nation, not just for a few select communities. These services should be provided at the lowest possible cost to taxpayers and resource-constrained public safety agencies by leveraging commercial operators' existing networks, financing capabilities, and interest in shared use of the PSBL spectrum. Action on a public safety network is long overdue and it is important that policy makers settle on a path forward so that a nationwide interoperable network can be constructed.

The second goal is to expand competitive broadband services for consumers nationwide. As Congress recognized in funding the Broadband Initiatives Program (BIP) and the Broadband Technology Opportunities Program (BTOP) as parts of the American Recovery and Reinvestment Act of 2009 (ARRA), broadband services provide critical infrastructure for economic growth, with additional benefits for environmental, health care, educational,

energy and other policy goals. The FCC and the Department of Justice correctly recognized that the public interest demands more spectrum for commercial broadband services and opportunities for additional providers to mount stronger challenges to the dominant carriers. While we applaud the efforts of Congress and the FCC to identify spectrum, the reality is that the near-term availability of new spectrum is severely limited and we have few opportunities to promote competition through release of new spectrum resources. Given this scarcity and its superior propagation characteristics, the D Block in particular is highly attractive for commercial broadband services. With licenses sized to be accessible to multiple bidders and fair auction rules, the D Block will foster competition for 4G mobile broadband services. And, it will generate significant revenues to help fund the public safety network.

As I explain in this testimony, the goal of meeting public safety needs is advanced by providing public safety with options, including network-sharing partnerships with the D Block licensees and other licensees of 700 MHz spectrum. Congress should not view the issue as an irreconcilable choice between helping public safety or facilitating broadband services for consumers and businesses. These goals are highly complementary. The D Block and PSBL spectrum operate within the same band class defined by the Third Generation Partnership Project (3GPP) for use in LTE networks, band class 14. That means that commercial utilization of this spectrum and the much larger base of wireless devices that will result from commercial use will provide significant scale benefits to public safety. In fact, commercial use may be essential to driving the necessary volumes of handsets and other devices needed by public safety. And as commercial use of this spectrum rises, the prices for public safety handsets should continue to decline.

The FCC's National Broadband Plan and the legislative discussion draft outline the best path to meet these twin goals of competition and public safety. The FCC should auction the D Block under rules that promote a competitive auction and competitive commercial services. The rules for D Block licensees should also position this spectrum to be used in shared network partnerships with public safety, if the public safety entities in each area so choose. These rules must include reasonably-sized area licenses such as cellular market areas (CMAs), transparent

auction procedures with no package bidding¹, the fourth generation technology selected by public safety entities (LTE, or 3GPP Long-Term Evolution), roaming and priority access on an equitable and compensatory basis, and devices that support all paired spectrum blocks in the 700 MHz band. Public safety entities, including those receiving early-build waivers from the FCC, would be in a strong position to form partnerships with the D Block licensees for shared use of the adjacent PSBL and D Blocks. The D Block licensees would have to compete against other 700 MHz licensees for these partnerships and public safety would have the option of proceeding on its own in particular areas if it desired.

The framework of a commercial auction for the D Block with the option of negotiated public/private partnerships now provides the fastest, clearest approach to achieving both commercial and public safety goals. Many other carriers, including other members of the Rural Cellular Association, likewise favor expeditious auction of the D Block.

PRINCIPLES FOR ACHIEVING THE PUBLIC SAFETY AND COMMERCIAL GOALS FOR THE D BLOCK

We believe that the public safety and commercial goals for the D Block require Congress and the FCC to implement four fundamental principles. U.S. Cellular believes that the steps outlined in the National Broadband Plan and in the legislative draft, under reasonable auction rules and with the recommended public funding, would implement these principles.

First, D Block licensees would be in a position to enter into partnerships with public safety to share spectrum for public safety and commercial customers. Shared use benefits the public safety community as well as commercial broadband users.

Second, there are strong economies from public/private partnerships utilizing commercial operators to construct and operate the nationwide interoperable broadband network. Public

¹ Package bidding is an auction procedure that allows a bidder to bid on a collection of licenses. This procedure has proven difficult to implement without introducing unintended opportunities to manipulate the auction rules in favor of the package bidder. Package bidding is also unfair because it introduces a bidding tool that is for all practical purposes only available to bidders with deep pockets.

safety would leverage the commercial operators' financing capabilities, operating efficiencies and advanced technologies in order to promote rapid build-out, greater coverage, and lower costs for both public safety and commercial users.

Third, there must be a competitive bidding process for the selection of commercial licensees for the D Block and that process must be fair and open, not biased in favor of any particular class of wireless carriers. As the experience of Auction 73 demonstrates, package bidding only serves to create opportunities for the largest bidders to exploit the auction rules to their advantage and to shut out smaller bidders. Smaller license areas, free of package bidding rules, are open equally to all bidders and produced much higher revenues in Auction 73.

Fourth, and most importantly, smaller license areas will generate more revenue during the bidding process, which will ultimately help ensure there is sufficient funding to enable public safety networks to be built and maintained. Furthermore such an arrangement will allow local public safety officials to pursue partnerships with local carriers with the best networks and the strongest community ties in each particular area. Auction 73 mistakenly offered the D Block as a nationwide license. It also made the C Block auction less competitive (and generated lower revenues for the U.S. Treasury) by offering mega-regional licenses subject to package bidding. By contrast, a D Block auction using area licenses would attract many carriers, large and small, that could build on their existing network infrastructure and operations in an area. These carriers may be more responsive to the varying needs of public safety agencies. Additionally, with multiple operators building area networks, network deployment will be faster, more extensive and more reliable than under a nationwide or mega-region approach as there will be no single point of failure that can shut down the whole country or large swaths of territory. U.S. Cellular believes that the ideal licensing approach would be based on Cellular Market Areas (CMAs), or as a second choice, the slightly larger Economic Areas (EAs). As it moves forward with legislation, the Congress should mandate the use of smaller license areas to enable partnerships, foster a competitive marketplace, and maximize auction revenues.

RULES FOR FCC AUCTION OF D BLOCK LICENSES

Congress should promote FCC rules for a successful D Block auction that attracts commercial bidders, increases competition for commercial services, and supports the formation of shared network partnerships meeting public safety's interoperability and other requirements.

Auction 73 failed to attract serious bids to the D Block because it offered a national license and left for post-auction negotiation major aspects of the obligations and rights of the licensee. Since the failure of the D Block auction in March 2008, there has been substantial progress in developing solutions for its shortfalls. I will mention four highlights.

First, in 2009 public safety organizations endorsed fourth-generation LTE technology and developed a set of requirements for this network. This critical decision has opened up a global 4G ecosystem to public safety. Building LTE networks in the D and PSBL Blocks, which share LTE's band 14, would give handset, chipset, and infrastructure manufacturers greater business certainty to support development of solutions in their equipment across the 700 MHz band.

Second, in April 2010 the FCC established the Emergency Response Interoperability Center (ERIC) that will lead the development of a technical and operational framework for the nationwide, interoperable mobile broadband wireless network. Other progress toward interoperability and coordination has come through the efforts of National Public Safety Telecommunications Council (NPSTC)'s Broadband Task Force and ongoing work of the Public Safety Communications Research (PSCR) Laboratories, a joint effort of the National Telecommunications and Infrastructure Administration (NTIA) and the National Institute of Standards and Technology (NIST).

Also in April 2010, the FCC released a comprehensive staff white paper analyzing the equipment and costs for nationwide public safety broadband services. Building on the National Broadband Plan recommendations, the study strongly endorses a shared network approach. The study finds that a stand-alone public safety network would suffer from in excess of \$20B of higher costs in failing to leverage commercial resources and technologies (including cell sites, towers, construction and operations capabilities, and access to handsets and other equipment).

Finally, in May 2010 the FCC granted conditional approval for 21 statewide or regional public safety interoperable mobile broadband networks using the PSBL spectrum. The FCC correctly imposed certain technical requirements to promote interoperability, including use of LTE, support for certain applications, and certain security features.

Along with U.S. Cellular's interest in bidding for D Block regional licenses and forming public/private partnerships for shared networks, there will be many other serious bidders in a properly-designed auction. Most commercial operators have a strong need for more spectrum in many markets in order to deploy fourth-generation broadband services. The 700 MHz D Block has excellent propagation characteristics, and many carriers have expressed their interest in area licenses in this band.

So while we all recognize that the chief objective here is to enable the development of shared network partnerships for the PSBL and D Blocks, Congress and the FCC have the additional opportunity to promote a more robust and competitive wireless market. The FCC's recent market analysis shows a troubling rise in wireless industry concentration. Moreover, spectrum – the lifeblood of mobile broadband services and wireless competition – has become highly concentrated in the hands of the two largest carriers. As noted earlier, reasonably-sized area licenses will be a win for competitive commercial services, a win for strong shared network partnerships with public safety, and a win for auction revenues, which under the draft legislation will directly fund construction and operation of the public safety broadband network. The auction rules should be transparent, not applying package bidding which deterred bidding on the C Block in Auction 73 and lowered auction revenues. Overall, the FCC's final auction rules can and should incentivize the participation of additional providers of 4G broadband services, and protect against further consolidation of spectrum holdings in the hands of the two largest carriers.

Additionally, the FCC's technical rules for the D Block should facilitate the formation of shared network partnerships with public safety by requiring LTE and requiring that devices support all paired spectrum blocks in the 700 MHz band. In addition, a widespread roaming and priority access obligation, established on an equitable and compensatory basis, will accelerate public safety access to better coverage and more capacity.

FEDERAL FUNDING FOR PUBLIC SAFETY BROADBAND SERVICES

U.S. Cellular applauds the Committee's proposal to use proceeds from the D Block and 1.6/2.1 GHz auctions to fund construction and operation of the public safety broadband network. As the FCC's technical and economic analysis showed, such funding is needed in some areas to meet public safety's demands regarding capacity, applications, coverage, reliability, security and other features.

To encourage public safety entities and commercial operators to form shared network partnerships and efficiently deploy shared networks, Congress should promptly adopt the proposed legislation. There is a window of opportunity for public safety entities to form partnerships with commercial entities to take advantage of the economies of shared network design, construction and operation. Future D Block licensees will start behind other 700 MHz licensees in constructing networks. They cannot be expected to build networks meeting public safety needs without adequate compensation, and the competitive marketplace will not allow them to delay network construction if the federal government has not approved funding for public safety construction and operations when the D Block licenses are granted. Moreover, uncertainty regarding future federal funding for this program will deter investments in shared networks.

CONCLUSION

U.S. Cellular strongly supports the Committee's legislative proposal and the FCC's plan for a commercial auction of D Block licenses followed ideally by shared public safety/commercial network partnerships. With the PSBL spectrum, adequate public funding and opportunities to negotiate with multiple commercial operators in a region, public safety entities will be in a strong position to develop favorable arrangements with D Block and other 700 MHz licensees, or to develop public safety-only networks if they so choose. The proposed legislation charts the best course by promoting vigorous competition in the D Block auction and commercial services and providing funding for construction and operation of public safety mobile broadband networks. The legislation promotes the two goals of meeting public safety needs and expanding commercial broadband services, all at the lowest possible burden on taxpayers.

Many commercial operators, including U.S. Cellular, want and need additional spectrum for broadband services. Reasonable rules and geographic scope for D Block area licenses would attract high bids and provide the basis for forming shared network partnerships with public safety entities. The federal government should expeditiously proceed with the D Block auction and creation of the shared network. U.S. Cellular is prepared to play a significant role by bidding on D Block area licenses, negotiating partnerships for public safety services, and deploying advanced mobile broadband services to American consumers and businesses.

Thank you for the opportunity to provide this testimony.