

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

Promoting Technological Solutions to) GN Docket No. 13-111
Combat Contraband Wireless Device Use)
in Correctional Facilities)

To: The Commission

**COMMENTS OF
THE BOEING COMPANY**

Audrey L. Allison
Director, Frequency Management Services
The Boeing Company
1200 Wilson Boulevard
Arlington, VA 22209
(703) 465-3215

Bruce A. Olcott
Preston N. Thomas
Squire Sanders (US) LLP
1200 19th Street, N.W.
Washington, D.C. 20036
(202) 626-6615

Its Attorneys

July 18, 2013

SUMMARY

The use of contraband cellphones by inmates in correctional institutions is a serious threat to the safety of prison employees, other prisoners, and the general public. To respond to this threat, the Commission has ample authority under the Communications Act to permit the use of managed access systems, including transmission on wireless carrier frequencies, either with or without spectrum lease agreements. Because spectrum lease requirements have the potential to introduce delays and burdensome costs to prison officials attempting to counter the threat and potential consequences of contraband cell phone use, the important public safety and public interest factors implicit in managed access systems should compel the Commission to reserve its right to authorize such systems without leases or carrier consent.

The principle that wireless carriers' use of the spectrum is subject to the Commission's authority is a longstanding principle underlying the Commission's actions. The Commission routinely grants experimental licensees and special temporary authority in wireless carrier frequencies, and federal policy permits use of electronic countermeasures in these frequencies to neutralize threats from explosive devices. The Commission's authority over wireless carriers was recently affirmed by the DC Circuit in the *Data Roaming Order*, which upheld the Commission's ability to require carriers to accept operation of devices on their spectrum.

The Commission's action on contraband cell phones in prisons may also create precedent for future proceedings, such as the regulatory framework for wireless devices aboard aircraft. European regulators considering the similarly isolated spectrum environment inside an aircraft cabin concluded that carriers have no expectation of control of spectrum within the cabin of an aircraft and that mobile devices in this unique environment could and must be controlled by the airline. To best ensure public safety and to preserve the Commission's ability to act in

furtherance of the public interest, Boeing urges the Commission to expressly reserve its statutory authority to authorize managed access services without any requirement for spectrum leasing or other carrier consent.

With regard to passive detection systems, the Commission should refrain from engaging in invasive technical regulation, which is unnecessary and likely unworkable. To ensure that non-contraband devices are not subject to deactivation, detection systems can incorporate multi-layered safeguards including professional installation, warning messages to users of suspected contraband devices, and wireless service provider involvement. These procedures are fully adequate to ensure that only contraband devices are deactivated, and the Commission therefore need not and should not impose strict technical requirements on systems where the mission requirements and circumstances of installation will vary widely from facility to facility.

TABLE OF CONTENTS

I.	THE COMMISSION CAN AND SHOULD CONSIDER MULTIPLE APPROACHES TO REGULATE MANAGED ACCESS SYSTEMS.....	2
II.	THE COMMISSION HAS AMPLE AUTHORITY TO PERMIT OPERATION OF MANAGED ACCESS SYSTEMS IN PRISONS WITHOUT A SPECTRUM LEASE AGREEMENT.....	5
III.	RELIANCE ON LEASE AGREEMENTS TO AUTHORIZE MANAGED ACCESS SYSTEMS COULD CREATE UNDESIRABLE PRECEDENT	9
IV.	THE COMMISSION SHOULD NOT ADOPT UNNECESSARILY DETAILED TECHNICAL REQUIREMENTS FOR DETECTION SYSTEMS.....	13
V.	CONCLUSION.....	15

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

Promoting Technological Solutions to) GN Docket No. 13-111
Combat Contraband Wireless Device Use)
in Correctional Facilities)

To: The Commission

**COMMENTS OF
THE BOEING COMPANY**

The Boeing Company (“Boeing”) provides these comments in response to the Commission’s Notice of Proposed Rulemaking (“Notice”) to facilitate the development of technological solutions for neutralizing contraband wireless devices in correctional facilities.¹ Boeing subsidiary Digital Receiver Technology, Inc. (“DRT”) manufactures a line of wireless location and management devices that emulate a base station to detect and manage wireless handsets of concern in a limited geographic area without significantly affecting normal traffic. Such devices provide law enforcement and prison officials an effective wireless management solution while avoiding service interruptions.

Boeing concurs with the Commission that the use of contraband devices by inmates is an important public safety priority that requires prompt action. Despite exploring “multiple technological solutions” to combat contraband cell phone use, however, the NPRM limits its discussion of managed access systems to a single regulatory solution assuming that all managed

¹ *Promoting Technological Solutions to Combat Contraband Wireless Device Use in Correctional Facilities, GN Docket No. 13-111, et al., Notice of Proposed Rulemaking, FCC 13-58 (2013) (“NPRM”).*

access systems will operate in prisons only pursuant to a spectrum lease agreement with each of the relevant wireless carriers. Granted, this is one possible approach. The Commission, however, has ample authority to license managed access systems without requiring a lease agreement or carrier consent. In light of the important public safety considerations at stake with contraband cell phones, Boeing urges the Commission to expressly reserve its right to license or otherwise authorize managed access systems without a lease agreement or carrier consent.

With regard to passive detection systems, the Commission should refrain from engaging in invasive technical requirements for such systems. System specifications such as desired location accuracy may vary widely based on the circumstances of a particular location and installation; and are best left to the discretion of the affected correctional institutions.

I. THE COMMISSION CAN AND SHOULD CONSIDER MULTIPLE APPROACHES TO REGULATE MANAGED ACCESS SYSTEMS

The Commission issued the contraband cell phones NPRM to combat a “serious threat to the safety of prison employees, other prisoners, and the general public.”² As the Commission has acknowledged³ and law enforcement commenters have confirmed, contraband wireless devices facilitate “undetected criminal activity, corruption, smuggling,”⁴ and their prevalence in prisons continues to grow as they become ubiquitous in general society.⁵ To respond to this threat, numerous parties have developed and preliminarily deployed technological solutions such

² *Id.*, ¶ 1.

³ *Id.*, ¶ 4-5.

⁴ Comments of Palm Beach County Sheriff Ric Bradshaw, GN Docket No. 13-111 (June 25, 2013).

⁵ *Id.*; Comments of the Kern County Sheriff’s Office, GN Docket 13-111 (June 27, 2013).

as managed access systems designed to detect and neutralize contraband wireless devices in correctional facilities.

The operation of managed access systems requires Commission authorization because they transmit hailing signals to attract wireless devices.⁶ The Commission notes that “thus far,” all managed access providers that have deployed systems have sought carrier consent through a spectrum lease because these hailing signals are in Commercial Mobile Radio Service (“CMRS”) frequencies.⁷ As a result, the NPRM appears to focus solely on spectrum leasing as the route to authorizing managed access systems.

Spectrum leasing, however, is neither the only legally permissible approach to authorizing operations in carrier spectrum, nor is it necessarily the most desirable approach. Authorizing managed access systems via spectrum leasing implicitly assumes that managed access system providers must obtain carrier consent through a spectrum lease in order to operate, and consequently that wireless carriers have the right to prohibit or condition the use of managed access systems. Likewise, a spectrum leasing approach allows carriers to charge for access to the spectrum needed to operate managed access systems. This practice, which carriers are already asserting, unnecessarily increases the cost to prison officials, local, state, and federal government, and ultimately to the taxpayers that support them.

In the limited deployment of managed access systems thus far, Boeing has not seen evidence that carriers have sought to limit or deny managed access providers access to the spectrum necessary to operate, and there is no reason to believe that carriers would refuse

⁶ 47 U.S.C. § 301.

⁷ *NPRM*, ¶ 26; *see also* Tecore Government Services, LLC, Application File No. 0005459692, Public Interest Statement (Nov. 2, 2012) (explaining that “leases with all such licensees are necessary to manage all wireless communications in order to detect contraband wireless usage within the prison”).

consent to operate such an important service. Nor have managed access providers complained of lease terms or conditions that impair significantly their ability to serve the needs of prison officials.

The operation of such an important public service, however, should not be left to the uncertainties of lease negotiations or business strategy decisions by wireless carriers. Correctional institutions should also not be subject to the potential delays of extended lease negotiations and coordination requirements. Although the Commission hopes to minimize a portion of such delays through the adoption of a streamlined lease approval process, its proposals only address the expedited consideration and approval of lease agreements by the Commission. Unfortunately, the NPRM does not address the far more cumbersome process of securing lease agreements for each installation from all of the wireless carriers.⁸

As Commission licensees, wireless carriers hold and use their licensed spectrum subject to the limitations of the public interest as defined by the Commission. Carriers can have no expectation of offering service to contraband cell phones or of using spectrum within the confines of a correctional institution to provide service when doing so would endanger the public or conflict with the lawful operation of the prison. Allowing wireless carriers to withhold or condition consent or to extract payment from correctional institutions or their contractors to remediate the threat would be inconsistent with the demands of public safety and the Commission's public interest mandate.

⁸ See Comment of Christopher B. Epps, Corrections Commission, State of Mississippi at 1 (June 28, 2013) (explaining that “[o]btaining spectrum leases from the commercial wireless network for these systems created significant delays in getting the systems operational”).

The Commission can and should consider alternative or additional approaches to regulate managed access systems. For instance, the Commission has ample statutory authority and precedent to issue a license on a secondary basis,⁹ including for the operation of managed access systems in spectrum licensed to wireless carriers. Such a license would be fully consistent with the Commission’s role as spectrum steward and with the wireless carriers’ non-exclusive right of use as spectrum licensees. As explained below, the Commission has ample authority to license managed access services in wireless carrier frequencies without carrier consent or license agreements, and Boeing urges the Commission to expressly reserve this authority in addition or as an alternative to spectrum leasing arrangements.

II. THE COMMISSION HAS AMPLE AUTHORITY TO PERMIT OPERATION OF MANAGED ACCESS SYSTEMS IN PRISONS WITHOUT A SPECTRUM LEASE AGREEMENT

The Commission routinely authorizes operations in wireless carrier spectrum when such operations would serve the public interest. The underlying premise of United States spectrum policy is that “[s]pectrum is a public resource,”¹⁰ and Title III of the Communications Act, as

⁹ The Commission has created numerous secondary allocations and routinely issues licenses for such use, including the Low Power Television Service, *see An Inquiry into the Future of Low Power Television Broadcasting and Television Translators in the National Telecommunications Systems*, BC Docket No. 78-253 (March 4, 1982), broadcast auxiliary operations, *see* 47 C.F.R. § 74.602(h), and Non-Geostationary Fixed-Satellite Service, *see* Rulemaking to Amend Parts 1, 2, 21, and 25 of the Commission’s Rules to Redesignate the 27.5-29.5 GHz Frequency Band (October 15, 1997).

¹⁰ *Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers and Other Providers of Mobile Data Services*, WT Docket No. 05-265, Second Report and Order, FCC 11-52, ¶ 62 (rel. Apr. 7, 2011) (“*Data Roaming Order*”); *see also id.* n.69 (discussing 47 U.S.C. §§ 301, 304, 309, which state the purpose of the Act as “to maintain the control of the United States over all the channels of radio transmission” and to provide for “use, under federally-issued licenses of limited duration, of channels of radio transmission...but not the ownership thereof,” and state that “no such license shall be construed to create any right, beyond the terms, conditions, and periods of the license”).

amended (“Act”) grants the Commission “broad authority to manage spectrum...and modify[] spectrum usage conditions in the public interest.”¹¹ Specifically, the Commission is authorized to “[p]rescribe the nature of the service to be rendered by each class of licensed stations and each station within any class” and, subject to the demands of the public interest, to “[m]ake such rules and regulations and prescribe such restrictions and conditions, not inconsistent with law, as may be necessary to carry out the provisions of this chapter.”¹² Of particular relevance, the Act empowers the Commission with the “authority to establish areas or zones to be served by any station.”¹³ Taken together, the Commission has acknowledged that it has authority under Section 303 to require wireless carriers to terminate service to contraband wireless devices in prisons.¹⁴ Boeing further suggests that the Commission likewise has ample authority to authorize the use of managed access systems in wireless carrier spectrum with or without a spectrum lease or carrier consent.

For instance, the Commission grants special temporary authorization (“STA”) and experimental licenses in wireless carrier spectrum. In recent years the Commission has increasingly required that experimental licensees seek coordination or carrier consent for experimental operations in wireless spectrum, but such license conditions are at the sole

¹¹ *Id.*

¹² *Id.*, ¶ 62 n.172 (citing 47 U.S.C. § 303(b), (r)).

¹³ *Id.* (quoting 47 U.S.C. § 303(h)).

¹⁴ *NPRM*, ¶ 60 (citing 47 U.S.C. § 303(b), (d)).

discretion of the Commission and are not statutorily mandated.¹⁵ Although wireless carriers have pressed for an “outright ban on experiments in these bands,” the Commission expressly concluded in a decision released earlier this year that “it is not in the public interest to categorically prohibit or restrict experimentation in commercial mobile service bands.”¹⁶ The Commission also concluded that it did not need to adopt a rule requiring experimental licensees to secure the consent of wireless carriers prior to operating in wireless carrier spectrum.¹⁷

That wireless carriers’ use of the spectrum is subject to the Commission’s authority was also a key holding of the *Data Roaming Order* recently upheld by the D.C. Circuit.¹⁸ AT&T had argued in that proceeding that Section 301 of the Act prevents the Commission from authorizing the use of devices such as consumer signal boosters on “CMRS carriers’ exclusive-use spectrum without a license or licensee consent.”¹⁹ The D.C. Circuit, however, implicitly rejected AT&T’s

¹⁵ 47 C.F.R. § 5.85(e) (explaining that “[t]he Commission may, at its discretion, condition any experimental license or STA on the requirement that before commencing operation, the new licensee coordinate its proposed facility with other licensees that may receive interference as a result of the new licensee’s operations”).

¹⁶ See, e.g., *Promoting Expanded Opportunities for Radio Experimentation and Market Trials under Part 5 of the Commission’s Rules and Streamlining Other Related Rules*, ET Docket No. 10-236, 2006 Biennial Review of Telecommunications Regulations – Part 2 Administered by the Office of Engineering and Technology (OET), ET Docket No. 06-155, Report and Order, FCC 13-15, ¶ 60 (2013) (“*Experimental Licensing Order*”).

¹⁷ *Id.*, ¶ 25 n.40 (citing Verizon Wireless Reply Comments at 1-2); see also *id.*, ¶ 54 (recapping Verizon’s recommendation that “any new rules explicitly require prior approval of a CMRS licensee before an experimental licensee may commence operations on CMRS spectrum”); *id.* ¶ 78 (explaining that the Commission disagrees “with commenters that advocate a consent requirement on program licensees that plan to experiment in commercial mobile service spectrum”).

¹⁸ *Cellco Partnership v. Federal Communications Commission*, 700 F.3d 534, 542-543 (D.C. Cir. 2012) (“*Cellco Partnership*”).

¹⁹ Letter from Michael Goggin to Marlene H. Dortch, WT Docket No. 10-4, at 1 (July 2, 2012) (“*AT&T Letter*”).

argument when it upheld the Commission’s *Data Roaming Order* and with it the Commission’s authority to require carriers to allow roaming customers—and their devices—to operate on another carrier’s spectrum.²⁰ As the Commission has since summarized, “[such] arguments rest on the assumption that these licensees have had an absolute right to exclude others for their spectrum. This assumption is invalid.”²¹ Although the *Roaming Order* permits carriers to “negotiate the terms of their roaming agreements”²² with other carriers, the requirement to enter into data roaming agreements demonstrates that the Commission at all times retains the authority to prescribe or modify the spectrum usage conditions of a given licensee, including obligating them to accommodate additional uses or users when the public interest demands.²³

Another example involves the federal policy of permitting the use of electronic countermeasures in wireless carriers’ spectrum by limited parties in the federal government under circumstances of public safety concern.²⁴ The National Telecommunications and Information Administrations (“NTIA”) has approved the Federal Bureau of Investigation’s use of wireless technology and CMRS spectrum to counter the threat of remote-control explosive

²⁰ *Cellco Partnership*, 700 F.3d at 543 (concluding that “the data roaming rule falls well within the Commission’s Title III authority”).

²¹ *Experimental Licensing Order*, ¶ 61.

²² *Data Roaming Order*, ¶ 43.

²³ *See Cellco Partnership* at 15.

²⁴ *See, e.g.*, 47 U.S.C. § 302a(c) (excepting “systems for use by the Government of the United States or any agency thereof” from the Commission’s general regulation of devices which interfere with radio reception); *NTIA Manual of Regulations and Procedures for Federal Radio Frequency Management, May 2012 Revision of the January 2008 Edition* at § 7.25 (“Use of Electronic Countermeasures/Equipment in Response to Radio-Controlled Improvised Explosive Devices”) (2012).

devices.²⁵ Any such operations are carried out without necessarily seeking the consent or coordination of wireless carriers. Such operations underscore the general principle that wireless carriers do not hold the absolute right to their licensed spectrum and that their usage of the spectrum remains at all times subject to the public interest. Similar to the threat of improvised explosive devices, contraband cell phones represent a clear and acknowledged public safety concern, and the use of managed access systems to neutralize this threat is consistent with federal policy and the public interest.

The Commission's rules regarding experimental licensing, electronic countermeasures, and data roaming demonstrate that the Commission has ample authority to unilaterally authorize operations in carrier spectrum without carrier consent when doing so would serve the public interest. In view of this substantial precedent, and the critical public interest need in neutralizing contraband wireless devices in prisons, Boeing requests that the Commission expressly reserve its right to continue to authorize non-carrier use of wireless carrier spectrum to enable operation of managed access systems in prisons.

III. RELIANCE ON LEASE AGREEMENTS TO AUTHORIZE MANAGED ACCESS SYSTEMS COULD CREATE UNDESIRABLE PRECEDENT

Because the Commission has at various times in the past had cause to authorize certain limited operations in bands licensed to wireless carriers, it can be anticipated that the Commission is likely to continue to encounter circumstances where the interests of public safety require such operations in the future. For this reason, Boeing urges the Commission to ensure

²⁵ *Contraband Cell Phones in Correctional Facilities: Public Safety Impact and the Potential Implications of Jamming Technologies: Hearing Before the S. Comm. on Commerce, Sci. & Transp.*, 111th Cong. 11 (2009) (prepared statement of Richard A. Mirgon, President-Elect, Association of Public-Safety Communications Officials International).

that its action in this proceeding does not inadvertently limit the Commission's authority to act in future proceedings which may raise similar issues.

One such possible precedent is the treatment of CMRS spectrum within aircraft cabins, which is relevant because of the growing use of wireless devices on aircraft. The Commission has recently adopted rules for the operation of Earth Stations Aboard Aircraft ("ESAA")²⁶ and is currently considering a petition to establish an Air-to-Ground ("ATG") service.²⁷ The increasing use of in-flight wireless devices raises the potential that the Commission and the Federal Aviation Administration ("FAA") may revisit this issue with regard to the permissible use of wireless devices and services onboard aircraft in flight.

Boeing is aware that the commercial aviation community has significant concerns about whether wireless devices should be permitted to operate on aircraft, and current Commission and FAA policy and regulations restrict such use.²⁸ Such rules would have to be revised in order to

²⁶ *In the Matter of Revisions to Parts 2 and 25 of the Commission's Rules to Govern the Use of Earth Stations Aboard Aircraft Communicating with Fixed-Satellite Service Geostationary-Orbit Space Stations Operating in the 10.95-11.2 GHz, 11.45-11.7 GHz, 11.7-12.2 GHz and 14.0-14.5 GHz Frequency Bands, IB Docket No. 12-267*, Notice of Proposed Rulemaking and Report and Order, FCC 12-161 (rel. Dec. 28, 2012) ("ESAA Order").

²⁷ *Expanding Access to Broadband and Encouraging Innovation through Establishment of an Air-Ground Mobile Broadband Secondary Service for Passengers Aboard Aircraft in the 14.0-14.5 GHz Band, GN Docket No. 13-114, RM-11640*, Notice of Proposed Rulemaking, FCC 13-66 (May 9, 2013) ("Air-to-Ground NPRM").

²⁸ See e.g. 47 C.F.R. § 22.925 (prohibiting the airborne use of 800 MHz cellular telephones); 47 C.F.R. § 90.423 (restricting the use of Specialized Mobile Radio handsets while airborne in certain circumstances); 14 C.F.R. § 91.21 (prohibiting the operation of any portable electronic device on passenger aircraft unless it has been determined that the particular device poses no risk to the aircraft).

permit use of in-flight wireless devices, and both the FAA and the Commission have investigated such revisions.²⁹

In 2004, the Commission released an NPRM proposing to replace or relax its ban on airborne usage of 800 MHz cellular devices.³⁰ One of the issues raised in the proceeding was “who should have rights to operate on 800 MHz cellular spectrum in an airborne pico cell environment” and how such conflicting rights might be apportioned.³¹ The NPRM tentatively proposed that “cellular licensees should have the right to operate pico cell systems on their licensed frequencies” but also noted that “pico cell operations would be airborne and transitory, rather than permanently located in any particular licensee’s terrestrial service area.” In response, Boeing, among others, noted that as a matter of aircraft operations and safety, control of the wireless spectrum within the cabin of an aircraft in flight should rest not with the carriers but with airlines or their designee.³² Because any such operations would use low power and be effectively isolated from terrestrial services through distance and technological means, they would have minimal or no impact on terrestrial services. Additionally, permitting the airlines to control airborne wireless use is consistent with airline control of other functions, services, and amenities used aboard the aircraft.³³

²⁹ See e.g. *Amendment of the Commission’s Rules to Facilitate the Use of Cellular Telephones and other Wireless Devices Aboard Airborne Aircraft*, WT Docket No 04-435, Notice of Proposed Rulemaking, FCC 04-288, ¶ 1 (2004) (“*Wireless Devices on Aircraft NPRM*”); see also *Passenger Use of Portable Electronic Devices On Board Aircraft*, Docket No. FAA-2012-0752, Notice of Policy, Request for Comments (August 27, 2012).

³⁰ *Wireless Devices on Aircraft NPRM*, ¶ 1.

³¹ *Id.*, ¶ 17.

³² See Comments of The Boeing Company, WT 04-35, at 8 (Filed May 6, 2005).

³³ *Id.*

Boeing also alerted the Commission to the need to ensure that United States regulations would be consistent with the outcome of then-ongoing deliberations by European regulators with regard to the operation of mobile devices on aircraft.³⁴ In 2007 the Commission terminated its proceeding on this issue citing “insufficient technical information” with regard to the interference potential of airborne devices into terrestrial networks.³⁵ Thus, although the issue remains relevant given the increasing use of wireless devices aboard non-U.S. airlines, many of which fly into the United States, central questions regarding the appropriate U.S. regulatory framework for their authorization and whether other parties should have rights to airborne use of CMRS spectrum within an aircraft remain unresolved.

The Commission of European Communities has since addressed this question, concluding that to ensure safety of aircraft operations and a coherent operating environment for airborne systems, the interior of an aircraft must be under the sole control of the aircraft operator, including the use of the spectrum.³⁶ Such regulatory and technical consolidation of control under a single entity increases the predictability for aircraft operators; without such a rule the operation of wireless devices would be paralyzed by the sheer number of conflicting regulatory and contractual regimes potentially in effect within the cabin of aircraft transiting Europe.

³⁴ See Reply Comments of The Boeing Company, WT 04-35 (Filed May 26, 2005) (attaching “Draft Decision on free circulation and use of Airborne GSM Base Transceiver Stations in the frequency bands 1710 – 1785 and 1805 – 1880 MHz”).

³⁵ *Amendment of the Commission’s Rules to Facilitate the Use of Cellular Telephones and other Wireless Devices Aboard Airborne Aircraft*, WT Docket No 04-435, Memorandum Opinion and Order, FCC 07-47, ¶ 3 (2007).

³⁶ *Commission Recommendation of 7 April 2008 on Authorisation of Mobile Communication Services on Aircraft (MCA services) in the European Community*, 2008/295/EC at (16) (2008) (noting that “[m]ember States have already granted rights of use of frequencies to terrestrial mobile operators...[s]uch authorisations do not cover MCA services and are generally limited to terrestrial mobile services”)

Similar regulatory, licensing, and safety issues are likely to arise if the Commission resumes its investigation of in-flight wireless device use in the United States. The Commission should therefore ensure that its actions in the contraband cell phones proceeding do not establish precedent that could impair its ability to act appropriately should it reach the same conclusion as the European Communities with regard to spectrum usage within aircraft.

IV. THE COMMISSION SHOULD NOT ADOPT UNNECESSARILY DETAILED TECHNICAL REQUIREMENTS FOR DETECTION SYSTEMS

The Commission's NPRM recognizes that, in addition to employing actively-transmitting managed access systems, prison officials are also exploring the use of non-transmitting passive detection systems that identify and locate contraband devices but do not directly affect their function.³⁷ The NPRM proposes rules that would require wireless carriers to terminate service to wireless handsets if requested to do so by correctional officials based on information obtained through the use of passive detection systems.³⁸ The NPRM then requests comment on whether the Commission should establish minimum performance standards for detection systems in order to ensure that wireless service is not terminated to consumers outside prison facilities or otherwise operating in compliance with prison requirements.³⁹ Such performance standards are unnecessary to the Commission's goal of ensuring that only contraband devices are subject to service termination, and are also likely to be technically unfeasible based on the myriad factors affecting system capabilities at any given institution.

³⁷ *NPRM*, ¶ 53.

³⁸ *Id.*, ¶ 65.

³⁹ *Id.*, ¶ 64.

First, both managed access and detection systems use highly specialized equipment designed and installed by professional technicians who are able to undertake sophisticated radio frequency propagation analysis based on the characteristics of each installation. Such professional installation ensures a high level of performance within the bounds of a prison facility as well as ensuring that the system is limited to the appropriate area. Despite numerous and lengthy trials of detection technology at various facilities around the country, there have been no reports of misidentification, and skilled installation ensures that occurrences will be unlikely.

Second, because detection systems are purely passive, no action is taken to suspend service to a suspected contraband device without undertaking a suitable process that involves the wireless carrier of the device in question. The Commission proposes that any termination be preceded by, for example, “a warning to the contraband device by [SMS] that the device is operating illegally.”⁴⁰ The Commission further suggests that “the text message could include a phone number that the end user could call to prevent the mistaken termination.”⁴¹ As the Commission notes in the NPRM, “action by a CMRS provider to terminate service to a contraband wireless device is the primary component of this proposal.”⁴² Such safeguards are entirely adequate to address the unlikely instance of valid devices being misidentified as operating impermissibly within the correctional facility grounds.

Finally, given the widely varying construction, layout, location, mission requirements, and budgets of correctional facilities, it would be difficult or impossible to develop a single

⁴⁰ *Id.*, ¶ 72.

⁴¹ *Id.*

⁴² *Id.*, ¶ 70-72.

coherent technical standard that applies to all possible implementations at all facilities. Such operational details are therefore best determined through collaboration of professional installers familiar with the radio frequency environment and correctional institution officials that are most familiar with the facility, and the proposed notification process will ensure a further layer of assurance should a misidentification occur.

Therefore, adequate precautions to avoid improper service termination have already been proposed in the Commission's NPRM and additional technical restrictions on the design and operation of cell phone detection systems are unnecessary and impractical.

V. CONCLUSION

The use of contraband cellphones by inmates in correctional institutions is a serious threat to the safety of prison employees, other prisoners, and the general public. To combat this threat, the Commission has ample authority under the Communications Act to authorize managed access systems either with or without spectrum lease agreements or carrier consent. The needs of public safety demand that the Commission be able to authorize correctional institutions to neutralize contraband cell phone use within the institution, and the Commission should not adopt a regime that would allow wireless carriers to deny or condition this ability or to benefit financially from the threat of continued use of such devices. That wireless carriers' use of the spectrum is subject to the Commission's obligations and authority is a longstanding principle illustrated in the Commission's experimental licensing proceedings as well as DC

Circuit's recent decision upholding the *Data Roaming Order*. Boeing therefore urges the Commission to expressly reserve its authority to authorize managed access systems with or without carrier consent or a lease agreement.

Respectfully submitted,
THE BOEING COMPANY

By:

A handwritten signature in black ink, appearing to read "Bruce A. Olcott", is written over a solid horizontal line.

Audrey L. Allison
Director, Frequency Management Services
The Boeing Company
1200 Wilson Boulevard
Arlington, VA 22209
(703) 465-3215

Bruce A. Olcott
Preston N. Thomas
Squire Sanders (US) LLP
1200 19th Street, N.W.
Washington, D.C. 20036
(202) 626-6615

Its Attorneys

July 18, 2013