

July 14, 2009

The Hon. John D. Rockefeller, IV  
Chairman  
Commerce, Science & Transportation Committee  
531 Hart Senate Office Building  
Washington, DC 20510

The Hon. Kay Bailey Hutchison  
Ranking Member  
Commerce, Science & Transportation Committee  
284 Russell Senate Office Building  
Washington, DC 20510

Re: S. 251, The Safe Prison Communication Act (SPCA)

Dear Senators Rockefeller and Hutchison:

The undersigned organizations write to voice our strong opposition to S. 251, The Safe Prison Communication Act (SPCA). The proposal to end the more than 75-year ban on deliberately interfering with authorized radio communications in the United States would place commercial and public safety communications in this country at needless risk. Not only do alternative means exist to address the problem of contraband cell phone use in prison, but the proposal to block cell phone use in prison by jamming will not achieve its objective of eliminating contraband cell phone use. As noted in a recent article in *Wired* Magazine: “A few layers tinfoil can shield a phone from the jamming signal.”<sup>1</sup>

Rather than rely on the self-serving promotions of a single company seeking to profit from this unfortunate security issue, prisons should work with cell phone providers to implement proven technological means to block and/or monitor contraband cell phone use within prisons. In addition, Congress should use this opportunity to address the real problem of overcharges for telephone calls from prisoners to their families and loved ones. The vast majority of contraband calls are made by prisoners to their families because prisoner families – often among society’s poorest – must pay outrageous collect call charges.<sup>2</sup> An approach that combined existing technology used in cooperation with cell phone companies, additional funds for prison security to fight the problem of contraband entering prisons in the first place, and reducing costs for authorized prisoner phone calls to reduce the need for contraband, will prove far more successful in the long run and will avoid putting our public safety and commercial wireless networks at risk.

### **The Importance of An Absolute Ban On Jammers**

Since its passage, the Communications Act of 1934 absolutely prohibited in no uncertain terms any

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<sup>1</sup> Vince Beiser, “Prisoners Run Gangs, Plan Escapes and Even Order Hits With Smuggled Cellphones,” *Wired* May 22, 2009 (“Beiser *Wired*”).

<sup>2</sup> See Beiser *Wired*, See also Media Justice Fund and Funding Exchange Report, “Criminal Charges: Excessive Criminal Phone Rates Take A Toll on Innocent Families (2009).

deliberate interference with a signal “licensed or authorized . . . by the United States.”<sup>3</sup> This provision has made it possible for licensees to design our current complex system of radio communication, cellular service, and other wireless networks secure in the knowledge that no one will deliberately interfere with their signals. Consumers, in exchange, have enjoyed the use of cell phones and other wireless devices without fear that anyone will seek to deliberately interfere with the transmission. For example, many travelers now chose to use their own cell phones or wireless internet connections, rather than pay traditionally higher rates charged by hotels. Public safety users likewise rely on the ability to use lifesaving wireless technologies without concern for jamming, a reliance that will continue to grow as new spectrum and new technologies become available to public safety and commercial users following the digital television transition and the clearing of the 700 MHz band for new public safety and commercial uses.

The introduction of legal cell phone jamming places this entire system at risk. History has shown that permitting the legal manufacture and sale of devices -- even for limited purposes -- will inevitably result in their becoming available on a mass consumer basis. For example, the use of wireless microphones in the broadcast bands is limited by FCC rule to a small number of licensed users and – in theory – strictly controlled to avoid possible interference with television viewing and other uses of the band. Despite these limitations, anyone can buy these microphones through retail stores and websites, and the number of unauthorized wireless microphones in the broadcast bands may well exceed 1 million.<sup>4</sup>

Congress should not create the risk of a similar proliferation of unauthorized cell phone jammers. Only a complete prohibition on cell phone jammers has successfully limited the sale and deployment of them in this country. Despite their availability in other countries, use of cell phone jammers in this country is forced underground and does little to interfere with commercial or public safety wireless use.<sup>5</sup> For this reason, both commercial and public safety licensees have consistently opposed the efforts of CellAntenna to receive a Special Temporary Authorization (STA) to test cell phone jammers in the United States.<sup>6</sup> Only a uniform ban with no exceptions will prevent the widespread use of jammers over time.

### **CellAntenna’s Claims That It Can Safely Block Contraband Calls Are Highly Suspect**

CellAntenna, the private company driving the campaign to legalize cell phone jamming in the United States, insists that it can block commercial cell phone signals in prisons, without interfering either with lawful cell phone use outside of prison or with public safety use in or outside of prison. CellAntenna has provided no proof of its claims. Rather, CellAntenna has sought to leverage a genuine public safety concern for its own profit by conducting unscientific and unauthorized demonstrations in various prisons. While these “demonstrations” allow CellAntenna to attract a fair amount of publicity,<sup>7</sup> they do nothing to demonstrate the validity of CellAntenna’s claims that it can affordably block contraband cell phone transmissions without

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<sup>3</sup> 47 U.S.C. §333.

<sup>4</sup> See *Informal Complaint and Petition for Rulemaking of the Public Interest Spectrum Coalition*, WT Docket No. 08-167, at vi.

<sup>5</sup> Even countries that prohibit civilian use but permit law enforcement and military use domestically have problems with cell phone jammers disrupting cell phone use. See, e.g., <http://www.methodshop.com/gadgets/reviews/celljammers/index.shtml>.

<sup>6</sup> See, e.g., Letter of Chris Fisher, President, Association of Public Safety Officials-International, Inc., to Michael Copps, Acting Chairman, Federal Communications Commission (March 13, 2009).

<sup>7</sup> Given that the FCC has unambiguously stated that the manufacture, importation, transportation, marketing and use of cell phone jammers violates Federal law, it would appear that CellAntenna’s numerous and highly publicized demonstrations are a felony which should result in fines and arrests rather than appearances at a Congressional hearing. See Public Notice, “Sale or Use of Transmitters Designed to Prevent, Jam or Interfere With Cell Phone Communications Is Prohibited In The United States,” DA-05-1776 (June 27, 2005), available at [http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DA-05-1776A1.pdf](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-05-1776A1.pdf)

interfering with public safety or legal wireless use.

As spectrum experts have explained, jamming contraband cell phone signals without jamming authorized communications presents an extremely difficult engineering challenge.<sup>8</sup> Cell phone signals use many bands, often proximate to or shared with public safety operations. To achieve its claims, CellAntenna's equipment must isolate the cell phone bands used by contraband phones, operating at sufficient power and with sufficient coverage to ensure that no transmissions will escape, while simultaneously avoiding any leakage into neighboring public safety bands, operating at sufficient power to ensure total coverage of the prison, but limiting power so that no energy escapes to create "dead zones" outside prisons or in areas used by guards.

Existing cell phone jammers do not engage in such delicate and precise spectrum blocking. Cell phone jammers are relatively cheap devices that engage in continuous transmission on the selected frequencies, creating "dead zones" by overwhelming a cell phone's receiver. These devices rely on brute force, without regard to operations taking place on neighboring bands. CellAntenna's claims far exceed the capabilities of existing cell phone jammers (where legal), raising considerable doubts that they can perform under circumstances other than the controlled demonstrations it has very publicly conducted.

CellAntenna will no doubt excuse itself by observing that the FCC has not granted it an authorization to conduct legal experiments – a fact which has not prevented CellAntenna from performing its demonstrations. But CellAntenna has neither applied for a genuine experimental license under which it could conduct real experiments, nor has CellAntenna conducted experiments in countries where cell phone jamming is legal.<sup>9</sup> Rather CellAntenna has preferred to engage in a strategy of holding public demonstrations of questionable legality and no engineering value as a means of promoting its legislative aims.

Congress should not force the FCC to create rules to authorize this jamming technology based on the unsubstantiated claims of a single company. At the least, Congress should not require the FCC to respond to petitions within 60 days, and create final rules within one year, as required by S. 251.

Finally, even if CellAntenna can jam signals with precision, prisoners have too many ways to evade jamming. Using commonly available materials such as aluminum foil or a roll of paper towel, a prisoner can block jamming signals and augment a contraband cell phone's transmission to a nearby cell tower. Furthermore, the widespread availability of contraband cell phones indicates the possibility of corrupt prison personnel, who could circumvent jammer technology in the same way they have circumvented existing security measures designed to prevent prisoner access to contraband phones.

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<sup>8</sup> See Letter of The American Association of State Highway and Transportation Officials (AASHTO) to Marlene Dortch, Secretary, Federal Communications Commission, filed in WT Docket No. 09-30 (March 18, 2009).

<sup>9</sup> It is useful to contrast CellAntenna's behavior with that of advocates of unlicensed use of the broadcast white spaces. White spaces advocates scrupulously obeyed all FCC rules and regulations, and applied for (and received) limited experimental licenses to conduct genuine experiments which produced meaningful engineering data. Only after years of building on developed technologies, and supported by a broad set of industry stakeholders, did the Commission feel confident enough to authorize tests of prototypes in the field.

## **Better Means Of Blocking Contraband Cell Phones Exist That Do Not Put Public Safety or Commercial Services At Risk.**

Given the importance of maintaining security in prisons, it might seem worth the risk to public safety and commercial services to authorize cell phone jamming in prisons if no other way existed. But existing cell phone technologies offer a better and safer alternative to CellAntenna's unproven precision jamming. In addition, Congress should address the underlying issues that make cell phone smuggling both possible and lucrative: inadequate funding of prison security, and the high cost to the families of prisoners when prisoners make legally authorized collect calls.

Cell phone providers can already adjust cell phone networks so that only authorized handsets can connect to the network. This practice, known as "white listing," will prevent any contraband phone from functioning without causing any interference to wireless systems. Alternatively, cell phone providers can log phone numbers of calls originating in prisons and submit these lists daily to appropriate prison officials to verify that no contraband hand sets are operating in the prison. This later approach has the added advantage that prison officials can secure warrants to monitor any calls originating from unauthorized handsets, assisting law enforcement in any investigation and helping to ferret out the underlying source of the contraband.

At the same time, Congress should take this opportunity to address the underlying issues that create the problem of contraband handsets in the first place. First, Congress should provide adequate funds for prison security, so that contraband does not penetrate prisons in the first place. In addition, Congress can also address the demand for contraband phones by requiring companies that service prisons to charge reasonable long-distance prices to the innocent families of prisoners. As documented in a recent report by the Media Justice Fund and Funding Exchange, it can cost the family of a prison inmate \$300 a month in collect charges to maintain minimal contact with an imprisoned father, mother, son or daughter. As further documented in *Wired Magazine*, the high cost of authorized telephone calls makes renting contraband cell phones in prison a lucrative business for prisoners and guards alike. While lowering the coast of legal phone calls between prisoners and families will not entirely eliminate the incentive to smuggle in contraband cell phones, it will help reduce the incentive and make the existing problem far more manageable.

## Conclusion

For all these reasons, the undersigned wish to make their opposition to CellAntenna's campaign to legalize cell phone jamming in this country a part of the public record in this hearing. For more than 75 years, the total ban on deliberate interference with authorized wireless transmissions has allowed wireless technology to develop in the United States in a robust and economical fashion. Allowing the legal manufacture, importation and sale of jamming equipment will create a loophole that history shows the FCC will find impossible to close. Because existing means of addressing the problem offer a far greater hope of success without the risk, Congress should refrain from amending the "jammer ban" in 47 U.S.C. §333.

Sincerely,

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