



even sale of such equipment to nonfederal entities is illegal simply because FCC has never adopted rules authorizing such jamming.

Section 333 is not an original section of the 1934 Act, but was an amendment requested in 1990 by FCC to solve a specific law enforcement problem - **not** to limit its jurisdiction. The legislative history is discussed in a March 16, 2009 SCDC letter to FCC that is attached as Appendix I along with a discussion of why limiting the jurisdiction of FCC was beyond the legislative intent of Congress in adopting Section 333.

### **SCDC Petition to FCC**

Appendix II is the SCDC *Petition for Rulemaking* submitted to FCC on August 6, 2009 and cosigned by 30 state prison systems and 2 regional systems. This petition seeks to authorize jamming under unprecedented strict regulations inspired, in part, by recent FDA regulations that permitted marketing of thalidomide under exceedingly stringent provisions that permit its benefits in certain cases where there is no alternative treatment and to prevent the horrendous negative consequences of the drug if it were used by anyone else.

In particular, the *Petition* urges FCC to base regulation upon the concepts of section 8.3.28 of the NTIA's Manual of Regulations and Procedures for Federal Radio Frequency Management (Redbook). This NTIA provision allows use of GPS reradiators that could cause improper operation of GPS systems under carefully controlled conditions.

#### **8.3.28 Use of Fixed Devices That Re-Radiate Signals Received From the Global Positioning System**

Except as otherwise authorized under Part 7.14, federal agencies and departments may, under the following conditions, operate fixed devices that re-radiate signals received from the Global Positioning System (GPS).

1. Individual authorization is for indoor use only, and is required for each device at a specific site.
2. Applications for frequency assignment should be applied for as an XT station class with a note indicating the device is to be used as an "Experimental RNSS Test Equipment for the purpose of testing GPS receivers" and describing how the device will be used.
3. Approved applications for frequency assignment will be entered in the GMF.
4. The maximum length of the assignment will be two years, with possible renewal.
5. The area of potential interference to GPS reception (e.g., military or contractor facility) has to be under the control of the user.
6. The maximum equivalent isotropically radiated power (EIRP) must be such that the calculated emissions are no greater than -140 dBm/24 MHz as received by an isotropic antenna at a distance of 100 feet (30 meters) from the building where the test is being conducted. The calculations showing compliance with this requirement must be provided with the application for frequency assignment and should be based on free space propagation with no allowance for additional attenuation (e.g., building attenuation.)
7. GPS users in the area of potential interference to GPS reception must be notified that GPS information may be impacted for periods of time.

8. The use is limited to activity for the purpose of testing RNSS equipment/systems.

9. A "Stop Buzzer" point of contact for the authorized device must be identified and available at all times during GPS re-radiation operation of the device under any condition.

Although this is an NTIA regulation, FCC issues licenses under its terms after coordination with NTIA. While the numerical limit of “-140 dBm/24 MHz as received by an isotropic antenna at a distance of 100 feet (30 meters) from the building where the test is being conducted” is probably not the correct limit for protecting CMRS operations, the same concept seems perfectly applicable for protecting isolated maximum security prisons that have large surrounding property that is off limits to the public and where corrections authorities have banned the use and possession of CMRS equipment under local laws.

While the CMRS industry likes to believe that it has exclusive use of its spectrum, this is not the case in FCC regulation. 47 C.F.R. 209 was approved in 1989 after the initial 1<sup>st</sup> generation AMPS system but before PCS and 3G rules and auctions. In addition, FCC rejected the CMRS industry’s viewpoint of exclusive spectrum use *again* in the ultrawideband rulemaking where it found that minimal UWB emissions in CMRS spectrum did **not** constitute harmful interference. Thus *de minimis* CMRS jamming signals at the boundaries of corrections facilities under an extension of the Redbook 8.3.28 conditions would be consistent with precedent. This would permit jamming at corrections facilities with large buffer areas around them which is the case in most maximum security prisons and would err on the side of protecting CMRS signals in more urbanized areas where corrections facilities had much smaller spatial buffers.

### **Managed Access**

The NOI discusses “managed access” as an alternative to jamming. Superficially it is an attractive alternative, however, its proponents have never addressed the full implications of this technology and particularly the cost implications. SCDC addressed many of these issues in an October 21, 2009 letter to FCC that is attached as Appendix III. While this letter has been on file at FCC for almost 8 months now, we have never seen a response from the proponents to these concerns.

For managed access to work, there must be equipment in or near a corrections facility that can act as a base station and terminate the radio link of each cell call originating in the corrections facility. This would require every CMRS carriers to participate in such a system. The CMRS industry has never indicated support for such a requirement.

The new base station would deny access to certain calls, but allow access to others, e.g. from neighbors or passing motorists (although it is not clear how the system could differentiate between inmate use and passing motorists.) Since the equipment terminates some legitimate traffic and connects it to the public switched network, it would appear reasonable that the CMRS carriers should pay at least some of the cost of this equipment. MSS is not aware of any indication of the CMRS carriers of doing so.

Finally, this is not Europe where CMRS carriers are obligated by law to offer only ETSI-approved GSM or IMT-2000 (3G). US CMRS carriers have great technical flexibility under present FCC rules and used it, for example, to introduce 2.5G systems. No doubt they will use it soon to introduce 3.5G systems. There has been not proposals from the CMRS industry for either nationwide standards for CMRS over the air interfaces or a requirement that any changes in existing systems be notified to whoever operates “managed access” systems with enough time to allow the systems to be modified to deal with the new interface.

Thus while it is easing to image a managed access system that handles *today’s* air interfaces, how does one guarantee in the name of public safety that the managed access systems will be upgraded as CMRS technology evolves?

One way would be a returning to a variant of the Open Network Architecture and Basic Network Elements of Title II regulation in the 1980s and early 1990s in which AT&T and the BOCs were required by FCC to announce publicly all network interface changes in advance so interconnecting parties would be able to adapt to them. I suspect that the CMRS community will soon realize that it doesn’t want to go down this path. But hey have been in a case of serious denial about this implication of their “managed access” alternative to jamming.

## Conclusions

Perhaps, managed access *could* be made to work, but it has tremendous financial and systems implications for the CMRS industry that have not been addressed. Localized jamming at isolated maximum security installations is much more straight forward. The apparent real fear of the CMRS industry is the “camel’s nose”/“slippery slope”/“Dutch boy’s finger in the dike” problem. This is a real concern, especially considering the dismal state of FCC enforcement today. But the solution is to adopt strict rules to address the immediate public safety menace of today’s contraband prison cell phones with jamming where it can be done safely and for industry to urge FCC and Congress on the need for Title III enforcement.



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