correctional facility, the system's operator must determine which CMRS carriers are operating in the area, and create a spectrum leasing arrangement with each. Even if the operator can secure a long-term lease agreement with every carrier, the time involved in negotiating the terms and conditions of each lease agreement prior to making the simple FCC Form 608 filing can create problematic delays in finalizing deployment. In the event that some, or even one, carrier refuses to enter a spectrum lease arrangement with a managed access system operator at a particular location, the managed access system can be defeated by inmates who use that service. CMRS frequencies that are not programmed into the system are points of exploitation that can render the solution ineffective.

For the purpose of simplifying the deployment of managed access systems, Petitioners suggest that the Commission promulgate rules that accomplish the following:

1) A requirement that CMRS carriers must agree to managed access leases of their spectrum if it is technically feasible in a specific installation without undue harm to legitimate CMRS uses, or, a formal determination that managed access systems can be "licensed" pursuant to the private commons provisions of Section 1.9080.[23]

2) A requirement that a CMRS carrier provide notice to managed access system operators within the carrier's service area in advance of making technical changes to the CMRS network that would adversely impact a managed access system's operations so that managed access system settings can be coordinated with the planned CMRS modifications.

3) Explicit quantifiable and reasonable limits on the "over-coverage" of managed access systems.

4) Explicit protection of E-911 performance in the managed access areas absent a specific exemption from the local PSAP.[24]

[23] 47 C.F.R. § 1.9080.

[24] In at least one pilot of managed access technology, the PSAP provider near a South Carolina prison requested that 911 access be blocked within the covered prison, since inmates were tying up 911 lines and operators.

2. Specific Rule Changes--Managed Access

a. Making spectrum accessible

Managed access solutions require access to the spectrum of CMRS carriers. The means by which a managed access system would currently operate on CMRS frequencies is pursuant to a spectrum lease arrangement governed by Subpart X of the Commission's rules. While such means can accomplish the end sought via long-term *de facto* lease agreements with the CMRS carriers serving the geographic location of a correctional facility, the process is replete with shortcomings. The spectrum lease arrangements codified at Sections 1.9001, *et seq.*, were designed to bolster a secondary market in spectrum usage, with commercial interests at heart. As such, the various lease arrangements provided in the rules do not contemplate the need for spectrum access associated with public interest considerations of the contraband wireless device crisis.

Under Section 1.9001, *et seq.*, the spectrum licensee has complete discretion as to whether or not to enter a lease agreement, and can charge the lessee for access. The negotiations leading up to a leasing arrangement can be as protracted as either party wishes to make them. Managed access systems are law enforcements tools needed to safeguard public safety. They are not commercially viable such that their deployment generates revenue, and when they are needed, timely deployment is of the essence. In order to function, access to spectrum MUST be arranged with every CMRS carrier that operates at the location of the correctional facility being served, and ideally, such access should be available for commencement simultaneously. For these reasons, the Commission must either: (1) modify the rules under Section 1.9001, *et seq.*, to require CMRS carriers to timely cooperate in the formation of spectrum leases for managed access systems at no cost; or, (2) declare that managed access systems are suited for a private commons arrangement.

Managed access solutions are effective only when every CMRS carrier serving the geographic location of a particular correctional facility cooperates by providing access to its frequencies. Reluctance or refusal

on the part of even one CMRS carrier diminishes the effectiveness of the system. To this end, it would be optimal to create a subpart of the rules that addresses mandatory cooperation by the wireless industry in much the same way the Communications Assistance for Law Enforcement Act ("CALEA") provisions in Subpart Z guide the telecommunications industry in its mandatory participation in providing call detail to law enforcement and corrections officials.[25] And since managed access systems are imbued with the same public safety and law enforcement objectives as those situations for which CALEA was created, CMRS carriers should be prohibited from imposing a fee for leasing their spectrum.

The Commission must also accommodate a managed access system operator's need for temporary authorization to operate when spectrum lease negotiations with one or more CMRS carriers are delaying a critical deployment. The circumstances associated with these deployments are not exact fits to those addressed by the current special temporary authority ("STA") provisions in Section 1.931 of the Commission's rules.[26] Rather than the "extraordinary" reasons for which STA's are typically sought and granted,[27] STA's might be required for most managed access deployments, especially at locations where there are multiple CMRS carriers with whom the managed access operator must negotiate spectrum lease arrangements. It is important to the efficacy of a managed access system that its deployment be conducted without notice to the prison population it covers. Therefore, public notice requirements in the acquisition of spectrum leases could jeopardize public safety. The Commission can streamline the STA process in these situations by adding a new subsection 1.931(2)(v), indicating that a STA will be routinely approved for the purpose of completing spectrum lease negotiations for a managed access system.

The repeated exercise of negotiating spectrum leases for the same frequencies with the same carriers at different locations around the country (and the commensurate need to request STAs each time) could be avoided if the Commission determined that this spectrum use lent itself to a "private commons"

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[25] 47 C.F.R. §1.20000, *et. seq.*; Pub. L. No. 103-414, 108 Stat. 4279, codified at 47 U.S.C. §§1001-1010 ("To amend title 18, United States Code, *to make clear a telecommunication carrier's duty to cooperate* in the interception of communications for Law Enforcement purposes, and for other purposes.")[emphasis added]
[26] 47 C.F.R. §1.931.
[27] 47 C.F.R. §1.931(a)(2)(iv).

arrangement.[28] "In a private commons arrangement, the licensee or spectrum lessee authorizes users of certain communications devices employing particular technical parameters, as specified by the licensee or spectrum lessee, to operate under the license authorization. A private commons arrangement differs from a spectrum leasing arrangement in that, unlike spectrum leasing arrangements, a private commons arrangement does not involve individually negotiated spectrum access rights with entities that seek to provide network-based services to ends users."[29] It would be most beneficial if the Commission determined that managed access systems require unfettered access to CMRS frequencies on a nationwide basis, albeit under prescribed technical and operational parameters. Petitioners request that the Commission adopt rules that outline the process for entering a private commons arrangement for this limited purpose.

b. CMRS carrier coordination of technical changes

CMRS technology is not static and its rapid evolution provides great benefits to our society and our economy. However, this rapid technological evolution presents a major problem for managed access systems in their role in protecting the public safety.

Of necessity, managed access systems must interact with mobile units located in or near prison property and the CMRS carriers' networks. In some countries, including the whole European Union, the technical nature of CMRS technology is strictly regulated and carriers can only offer standard technologies such as GSM or UMTS. A major strength of FCC spectrum policy over the past two decades has been the absence of such microscopic technical regulation and the freedom for CMRS carriers and their suppliers to innovate rapidly and get new services to the public. Inherent in this freedom is the potential to render managed access systems ineffective, thereby endangering the public, unless some attention is paid to details. The Petitioners do not seek a European Union-like technology monoculture, but rather,

[28] 47 C.F.R. §1.9080.
[29] 47 C.F.R. § 1.9080(a).

reasonable assurances that CMRS networks and managed access systems can practically evolve together to follow changes initiated by carriers to better serve the public.

Ideally, modifications in the carrier's network and the managed access system would be carried out synchronously. Even a simple reconfiguration of cellular sites, without any other networking changes, occurring near a prison with a managed access system, could impact the proper operation of that system. This could entail moving a nearby base station either closer to the prison or further away or changing a power level or antenna pattern. It is essential that such changes be shared with the managed access operator with adequate time to assure that the managed access system is modified in synchronism, if necessary, for a specific change.

Petitioners request that the Commission adopt rules for managed access systems that require that each CMRS operator providing service at prison locations notify the managed access operator or prison administrator in advance of any network changes that are likely to impact the managed access system and that the rules require that CMRS operators negotiate in good faith on the implementation timing of the change.

c. *Limits on over-coverage of managed access systems*

Just as with jamming systems, managed access systems have a finite, but real, risk of over-coverage of the prison area with a resulting potential to impact the general public beyond the secure areas of prison property. This risk is minimal in most prisons, because of large buffer zones; however, in urban jails and prisons with smaller buffer zones, there is a risk of over-coverage. Absent any regulatory standards for how much over-coverage is acceptable, there is a real risk of litigation from members of the general public whose service is impacted, even if the impact is minimal. Therefore, Petitioners request that the Commission adopt explicit standards on how much over-coverage is acceptable and make it clear that such incidental over-coverage is consistent with the CMRS service offered by carriers.

d. Protection of E-911 operations

Petitioners urge the Commission to include in any new rules covering contraband wireless device solutions an explicit statement that E-911 systems may not be compromised by solution operations except in the limited circumstance of authorized jamming systems. Any jamming system should be required to be approved by the PSAP operator whose area covers the prison location. Petitioners believe that the PSAP operator, as a local public safety official, is in the best position to determine whether an E-911 impact serves the public interest in protecting public safety in that specific area, and can assure that all affected public safety organizations are aware of the system that has been authorized.[30]

D. Jamming

1. Not Prohibited by Section 333

Conventional wisdom holds that Section 333 of the Communications Act of 1934, as amended, (the "Act")[31] limits FCC jurisdiction to authorize jamming. Petitioners offer three viable interpretations of the Act that permit the Commission to authorize jamming: (1) Section 333 was not intended to limit the Commission's authorization for jamming; (2) whatever Section 333 means, it applies equally to the FCC and NTIA,[32] and since NTIA has consistently found it can authorize jamming, FCC has the same authority; and, (3) a change to Section 22.3(b)[33] of the Commission's Rules would make the illicit use of wireless devices within correctional facilities generally unauthorized, and therefore jamming would not be prohibited by any reading of Section 333.

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[30] By law and policy, inmates and staff on prison property do not need mobile access to 911 operators. For decades, prison administrators have developed systems and procedures for dealing with emergencies and for protecting the public, prison staff, and visitors, and inmates. These policies, practices and procedures have been upheld against repeated challenges in state and federal courts.

[31] Pub. L. 101-396, §9, September 28, 1990, 104 Sta. 850; 47 U.S.C. § 333.

[32] *See* Senate Report (Commerce, Science, and Transportation Committee) No. 101-215, 101st Cong., Nov. 19, 1989 ("*The provision in the reported bill also applies to Federal Government radio communications.* Interference to these communications is now covered by 18 U.S.C. §1362. The inclusion of this new provision will provide the FCC with a stronger basis for investigating and seeking prosecution of interference complaints by Federal agencies.")("S.R. 101-215")[emphasis added]

[33] 47. C.F.R. § 22.3(b).