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445 12th Street, S.W.
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FOR IMMEDIATE RELEASE:
March 9, 2000

News Media Contact:
Meribeth McCarrick at (202) 418-0654
e-mail: mmccarri@fcc.gov

FCC Adopts Rules for Guard Band Manager Auction

Washington, DC -- The Federal Communications Commission (FCC) has adopted licensing and service rules governing the operation of 6 MHz of “Guard Band” spectrum in the 700 MHz band to be auctioned this year. The service rules for this Guard Band spectrum will minimize the potential for harmful interference to public safety operations in the immediately adjacent 700 MHz spectrum. The adopted rules also create a new class of commercial FCC license called the Guard Band Manager license. Guard Band Managers will be engaged in the business of subdividing the spectrum they acquire at auction and leasing it for value to third parties, including both commercial service providers and private wireless users.

As directed by Congress, the FCC adopted rules to ensure that public safety service licensees in the 700 MHz band “continue to operate free of interference from any new commercial licensees.” The measures adopted, which are largely consistent with the recommendations of public safety organizations that participated in this proceeding, will provide a strong degree of interference protection to public safety services from adjacent Guard Band users.

In the Balanced Budget Act of 1997, Congress directed the FCC to reallocate spectrum in the 700 MHz band to commercial and public safety uses from its previous exclusive use for television broadcasting service on channels 60-69. A total of 36 MHz was allocated for commercial uses. In a January 6, 2000 Report and Order, the FCC adopted service rules for 30 MHz of this spectrum. At that time, the FCC designated the remaining 6 megahertz as Guard Band spectrum consisting of two paired bands, one of 4 megahertz and one of 2 megahertz. Today’s item adopts licensing, technical, and operational rules for the Guard Bands.

Specifically, the adopted item made the following determinations:

- The FCC adopted rules that will give the fullest effect to the Congressional mandate to ensure that public safety licensees in the 700 MHz band operate free of interference from any new commercial users in that band. Under these rules, public safety licensees should experience no greater interference risk from Guard Band users than from other public safety licensees. To minimize the potential for harmful interference to public safety operations in the immediately adjacent 700 MHz spectrum, the FCC required entities operating in the Guard Bands to comply with specified “out-of-band emission” criteria, and with prescribed frequency coordination procedures that include advance notification to the Commission-recognized public safety frequency coordinators and adjacent area Guard Band users. The FCC also found that entities operating in the Guard Bands should not be permitted to employ a cellular system architecture. The public safety community has expressed great concerns that the frequency coordination procedures required of entities operating in the Guard Bands could not be accomplished when users employ a cellular system architecture.

The FCC concluded that the use of such architectures would create undue risks of harmful interference to public safety users.

- Licenses in the Guard Bands will be assigned to Guard Band Managers using competitive bidding (auctions). The Guard Band Manager will be a new class of commercial licensee who will be engaged in the business of leasing spectrum for value to third parties which could include both commercial service providers and private parties. Guard Band Managers will be required to adhere to strict frequency coordination and interference rules, and control use of the spectrum so as to facilitate protection for public safety. The Guard Band Manager may subdivide its spectrum in any manner it chooses and make it available to system operators or directly to end users for fixed or mobile communications, consistent with the frequency coordination and interference rules specified for these bands. This licensing represents an innovative spectrum management approach that should enable parties to more readily acquire spectrum for varied uses, while streamlining the Commission's spectrum management responsibilities.
- Licenses will be auctioned for both the 2 megahertz and the 4 megahertz Guard Bands on the basis of 52 Major Economic Areas (MEAs). MEAs will provide an opportunity for both aggregation and partitioning of geographic areas to suit a wide variety of possible business plans, as long as it can be shown such aggregation or partitioning will not adversely affect public safety. MEAs will facilitate greater participation in the auction and allow a larger number and more diverse pool of Guard Band Managers than nationwide or larger regional licensing areas, resulting in increased competition and broader flexibility in spectrum offerings by Guard Band Managers.
- Guard Band Manager licensees have many potential benefits, including: (1) Guard Band Managers will provide for market-based transactions in wireless capacity at a time when access to spectrum is a critical need for a wide variety of wireless operations; (2) spectrum users will have more flexibility in obtaining access to the amount of spectrum, in terms of quantity, length of time, and geographic area, that best suits their needs; (3) development of a "free market" in spectrum could result in more efficient use of this limited resource; (4) this licensing approach will streamline the day-to-day management of this spectrum and many spectrum-related functions now carried out by the FCC in other bands will be handled by Guard Band Managers in this band.

Action by the Commission on March 8, 2000 by Second Report and Order (FCC 00- 90). Chairman Kennard, Commissioners Ness and Tristani with Commissioners Furchtgott-Roth and Powell approving in part, dissenting in part and Commissioners Ness, Furchtgott-Roth, Powell and Tristani issuing separate statements.

Wireless Bureau Contacts: Gary Michaels at (202) 418-0660, e-mail: gmichael@fcc.gov or Marty Liebman at (202) 418-1310, e-mail at: mliebman@fcc.gov, TTY at (202) 418-7233.

WT Docket No. 99 –168



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March 9, 2000

**Press Statement of Chairman William E. Kennard on
Adoption of Rules For Upcoming Guard Band Manager Auction**

Today the FCC took important steps to protect the public in times of emergency. The rules we have adopted will ensure that vital police, firefighter and other emergency operations will not be threatened by harmful interference from new commercial spectrum users.

We also created a new type of licensee to bid on this spectrum - Guard Band Managers. Guard Band Managers will be in the business of leasing their spectrum to other companies in ways that best suit their individual business needs. This is an innovative and efficient approach to licensing, and expands upon previous work done by the Commission to advance its spectrum management policies.

- FCC -

Separate Statement of Commissioner Susan Ness

Re: In the Matter of Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission's Rules, Second Report and Order, WT Docket No. 99-168

With this Order, we conclude our adoption of rules for licensing new commercial services in the spectrum currently utilized by television channels 60 to 69. In the near future, we will auction a total of 36 MHz in the 746-806 MHz band. In our *First Report and Order* in this proceeding, I strongly supported our actions unleashing 30 MHz of prime spectrum for a variety of wireless services that could include fixed and mobile Internet access. Our decision balanced the needs of a number of competing demands for spectrum, including those seeking to provide wireless alternatives to the local loop, fixed high-speed Internet connections and advanced mobile services. We provided for an extremely flexible allocation of expansive regional 10 MHz and 20 MHz spectrum blocks with the capability for paired channels; the marketplace will determine which services will be provided to the public. From this action will flow the deployment of new advanced wireless services that will benefit the public.

In our *First Report and Order*, I also supported the designation of 6 MHz of spectrum to serve as guard bands to ensure that the public safety service licensees that will operate in the 700 MHz band will “operate free of interference from any new commercial licensees.” While I strongly considered a flexible allocation of 36 MHz relying on technical constraints alone to protect public safety operations, I concluded with my colleagues that the Congressional directive to maximize our protection of public safety communications was best served by establishing guard bands. Today I also support the strict technical rules, coordination requirements, and architectural restrictions we adopt to further ensure, as Congress mandated, that public safety organizations using frequencies adjacent to commercial operations in this band do not suffer harmful interference to their critical communications services. In supporting these restrictions, my objective, as it was in establishing the guard bands, is to protect public safety operations from interference. I have listened carefully to the representatives of public safety organizations across this country, including APCO and the Independent Association of Police Chiefs, and reviewed the conclusions of our staff regarding potential interference to public safety operations. While it is a difficult balance, I believe the Commission and its staff have made the wisest choices to protect public safety. I support the proposed restrictions because I conclude that we should not take any unnecessary chance that adjacent commercial operations will interfere with the efforts of those who place their lives on the line to protect and secure the public safety.



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COMMISSIONER HAROLD FURCHTGOTT-ROTH ARGUES FOR GREATER FLEXIBILITY IN GUARD BANDS

Media Contact: Bryan Tramont
418-2000

I am pleased that the Commission has finalized its plans for the 700 MHz auctions. However, I must respectfully dissent from those portions of the order barring cellular-style architecture and restricting licensees to “guard band managers.” In order to protect public safety operations, I would have set strict interference limits and enforced them – without the majority’s limitation on the system architecture. This limitation blocks innovation and invites government micro-management. I would also have allowed any technically-compliant applicant to bid on the guard bands, rather than limiting eligibility to “guard band managers.” Limiting an auction to one type of licensee shortchanges the public and the marketplace. Here, we have gone a step further by dictating a particular business plan. In an era in which the Commission voices support for deregulation and market forces, it is ironic that the sole licensees in this band must adopt a business model developed in the halls of government. Needless to say, in my view, that represents a step backwards.

March 9, 2000

**Separate Statement of
Commissioner Gloria Tristani**

Re: *Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commissions Rule, Second Report and Order, WTB Docket No. 99-168.*

Although both sides have made worthy claims to serving the public interest, I support the decision to impose technical restrictions in the Guard Band spectrum, including a ban on cellular system architecture. The 700 MHz spectrum is well-suited for new services that will help fulfill consumers' growing wireless needs and demands. Interested parties tout its potential for next generation mobile services and fixed wireless broadband services that can be deployed ubiquitously. Even the Guard Bands, which total six megahertz of spectrum, have generated proposals for a variety of uses, including delivery of broadband services to underserved and unserved areas. The challenge of the *700 MHz proceeding*, however, has been to craft a framework that allows for the deployment of such new and innovative services, while fulfilling the Congressional mandate that public safety operations using adjacent spectrum are protected from harmful interference. I believe that our action today, together with the *First Report and Order*, strikes an appropriate balance.

In the 1997 Balanced Budget Act, Congress directed the Commission to reallocate the 746-806 MHz band from exclusive broadcast use to public safety and commercial uses.¹ In doing so, Congress mandated that the Commission establish rules to protect public safety users from harmful interference caused by television broadcasters.² In addition, Congress directed the Commission to ensure that public safety users "continue to operate free of interference from any new commercial licensees."³ I take this direction most seriously. As policymakers, we need to ensure that those who dedicate themselves to protecting life and property can do their jobs without worrying that their communications links may be severed at any moment.

Working with the public safety community, industry, my colleagues and Commission staff, I have sought to provide service rule flexibility while limiting the potential for harmful interference to public safety operations. In the 30 megahertz of spectrum that was the subject of the *First Report and Order*, we adopted rules that take account of these two objectives. Although certain technical restrictions apply, I have no doubt that consumers will benefit greatly from the new services that will be deployed in this spectrum and the exciting applications that will result.

¹ 47 U.S.C. § 337(a), amended by the Balanced Budget Act of 1997, Pub. L. No. 105-33, 111 Stat. 251, § 3004 (1997) (directing that 24 megahertz of spectrum be reallocated for public safety use and 36 megahertz be reallocated for commercial use).

² 47 U.S.C. § 337(d)(4).

³ H.R. Conf. Rep. No. 105-2015, at 580 (1997).

To give full effect to Congress' direction, however, we adopt rules today that impose further technical requirements on Guard Band spectrum immediately adjacent to public safety spectrum. In particular, we require entities operating in the Guard Bands to adhere to the same interference protection regime that governs 700 MHz public safety users. Guard Band Manager licensees will be responsible for engaging in frequency coordination with public safety coordinators. In addition, the rules we adopt today prohibit cellular system architectures in the Guard Bands. The public safety community asserts, and I have come to believe, that as a practical matter cellular architectures adjacent to public safety users would create significant hardships in the frequency coordination process and could increase the potential for harmful interference. Despite the enticing potential the Guard Band spectrum offers for certain commercial uses, I believe that our primary obligation here is to limit the potential for such harmful interference.

I support the action we take today, which fulfills the Congressional mandate to ensure that public safety users may operate in the 700 MHz spectrum without harmful interference.

**SEPARATE STATEMENT OF COMMISSIONER MICHAEL POWELL,
DISSENTING IN PART**

Re: Service Rules for the 746-764 and 776-794MHz Bands, and Revisions to Part 27 of the Commission's Rules (Guard Bands), WT Docket No. 99-168, *Second Report and Order*

I support the decision in this *Second Report and Order* to establish firm technical rules for the "Guard Bands" in the 700 MHz band designed to protect very important public safety radio operations in the adjacent bands. The additional time spent in seeking comment on the technical issues has yielded valuable information demonstrating that allowing cellular architectures in the Guard Bands would present an unacceptable risk of interference to public safety licensees. The enhanced coordination difficulties would also be too much to ask taxpayer-supported public safety agencies to overcome. Therefore, I will generally defer to the judgments and recommendations of our engineering experts in the Wireless Telecommunications Bureau and the Office of Engineering and Technology on these technical and coordination issues, absent clear and convincing contrary showings. None being presented here, I accede to the judgment that cellular architectures would pose an unacceptable risk to public safety. I do so, exclusively, on technical and coordination grounds.

However, I part company from my colleagues' decision to set-aside these Guard Band licenses for a single flavor of commercial user -- the "Guard Band Manager" (GBM). Guard bands are a valid spectrum management tool used to protect adjacent spectrum from unacceptable interference, and with public safety frequencies at issue, one can easily see the importance of employing them. Of course, if we were unwilling to accept even minimal interference from the Guard Bands, we would disallow any providers from operating therein. Yet, the Commission has accepted with some merit that it is spectrally efficient to allow some operation in the band, for services that can operate under strict technical limitations. I agreed with that prior decision, but what is bewildering is the majority's decision today to allow only one — government-designed — type of commercial provider in the Guard Bands. The majority does not assert, as it could not possibly, that it has done so because only GBMs can operate safely in the band. Instead, having hatched its prized creation, like Dr. Frankenstein, the Commission wants to incubate the creature in its own sheltered nest. I am not flatly opposed to the band manager concept as a way to facilitate the privatization of some of our licensing functions and to make more spectrum available to end users. I do believe, though, that granting them exclusive territory in these Guard Bands is unwarranted and ill advised for a number of reasons.

First, the set-aside is unnecessary to protect public safety, which was the sole purpose for establishing the Guard Bands in our previous Order. The additional interference protections and procedures adopted here adequately further that purpose. There is no reason to conclude that a GBM can meet the specifications, but no other imaginable commercial licensee could. Moreover, disallowing cellular architectures diminishes the threat of interfering uses resulting from a proliferation of carriers in the band, which as a practical matter severely narrows the number and type of viable applicants and users that might seek this spectrum. Finally, the further step of regulating various aspects of the commercial relationship between Guard Band licensees and end users may cost us credibility when it comes to judging our ability to adopt, implement and enforce our technical rules.¹

¹ In addition to meeting our technical restrictions designed to protect public safety, the Order provides that Guard Band licensees (1) must make the licensed spectrum available to third parties only through "leasing" the spectrum and act only as a "spectrum broker," not as a wireless service provider (Order at ¶¶ 27 and 54); (2) are required to lease the "predominant amount of their spectrum" to non-affiliates (*Id.* at ¶ 59); (3) are limited in the first auction to one of the Guard Band Manager licenses in each market for competitive reasons (*Id.* at ¶ 62); and (4) are prohibited from imposing on end users "unduly restrictive requirements" on use of the licensed frequencies, such as requiring an end user to purchase telecommunications equipment only from one manufacturer or vendor, to require use of a particular technology, or to impose operating rules that would have the same practical effect (*Id.* at ¶ 66). I fear that

Second, restricting the Guard Bands to one form of licensee smothers the development of innovative uses of the band, employing different business models and technology. I regret that rather than extending our prior successes in employing greater licensee flexibility and fully competitive auctions in order to promote the highest and best use of commercial spectrum, we are leaning back from these principles. As a consequence, potential licensees with new and innovative ways to use these guard bands will either be excluded from the auction or be forced to modify their business plans (in a very short time period) to qualify as a GBM. It is the auction process and the market that should pick the winning and losing business models for the provision of spectrum-based services. If any entity can comply with the technical rules, they should not be shut out of the auction or forced to re-tool quickly their business.

Third, I am concerned that reserving the Guard Band to GBMs is not entirely faithful with Congress' direction. We re-allocated this spectrum, pursuant to the 1997 Balanced Budget Act, for "commercial uses."² Nevertheless, the *Notice* in this proceeding sought "comment on the extent to which, consistent with the statute, the spectrum here can and should be available for private mobile and private fixed radio services."³ There has been some genuine doubt as to whether spectrum secured for private internal use complies with the statute's commercial use requirement.⁴ Sufficiently concerned with the language of the statute, the Commission has developed a new approach to the Band Manager concept and now, according to the government, GBMs shall be in the "business of leasing spectrum."⁵ To its credit, the majority does not, however, restrict GBMs to serving only private wireless users, and will permit them to lease spectrum to a wide range of customers, including network operators that provide fixed or mobile internal communications services or commercial radio services to end users.⁶ But, let's look closer: (1) the prohibition on cellular architectures tends to favor private and other types of spectrum users that traditionally deploy non-cellular technology and are experienced in coordinating among various site-based licensees, including public safety operations; (2) we originally conceived the Band Manager concept as a mechanism for auctioning spectrum allocated to private radio services;⁷ (3) the purpose of

these limitations on a Guard Band licensee's business will also tend to restrict eligibility and participation in this auction.

² 47 U.S.C. 337(a)(2); Reallocation of Television Channels 60-69, the 746-806 MHz Band, ET Docket No. 97-157, *Report and Order*, 12 FCC Rcd 22953, 22962-63 ¶ 20 (1998) ("The Budget Act requires that we assign this portion of the band for commercial use by auction. Private organizations or industry groups, however, will have the opportunity to seek the desired spectrum by participating in the auction.").

³ Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission's Rules, WT Docket No. 99-168, *Notice of Proposed Rule Making*, 14 FCC Rcd. 11006, 11014-15 ¶ 15 (1999) (emphasis added). Several commenters in this proceeding suggested that our band plan should include spectrum allocated for use by the private wireless industry and licensed to Band Managers through auction.

⁴ See Order at ¶¶ 36-41 (dedicating significant ink to these "statutory considerations" and concluding that the business of leasing spectrum as a GBM constitutes a "commercial use" even if private users are permitted to lease spectrum from GBMs.)

⁵ Order at ¶¶ 2 and 41.

⁶ See Order at ¶ 41. As Commissioner Furchtgott-Roth points out, it is unclear whether GBMs are permitted to provide service directly to the "public" or only through a separate affiliate. See also Order at n. 61.

⁷ See Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended, WT Docket No. 99-87, *Notice of Proposed Rule Making*, 14 FCC Rcd 5206, 5247-49 ¶¶ 88-95 (1999) ("[A] Band Manager would be eligible to apply for a private radio license, with mutually exclusive applications subject to resolution through competitive bidding. The Commission's principal role would be to allocate spectrum for private services, establish the size and scope of the Band Manager license, and conduct auctions if mutually exclusive applications are received. As a condition of the Band Manager license, the Band Manager would be required to restrict its

the requirement that GBMs lease the predominant amount of their spectrum to non-affiliates is to “ensure that we conduct a useful test of the Band Manager concept and obtain the full benefits of this new licensing approach, a core feature of which is leasing spectrum to third parties” (Order at ¶ 59); and (4) most telling, again, the result here is that only GBMs can bid for Guard Band spectrum. Thus, when viewed in totality, it is evident that this exclusivity is principally designed to substantially increase the likelihood (if not guaranty) that the spectrum ultimately lands in the hands of private users. This raises some question as to whether we have acted within the full spirit of Congress’ statutory objective.

I would have preferred that the guard band auction be open to all eligible businesses that are willing to comply with our technical rules. Accordingly, I respectfully dissent to the decision in the *Second Report and Order* to license the 700 MHz Guard Bands exclusively to Guard Band Managers.

operations to the offering of internal communications services and/or capacity to an identified class of private radio eligibles.”).