THE GENERAL WIRELESS COMMUNICATIONS SERVICE: FCC SPECTRUM TRAFFIC COP OR BROKER?

Tara Susan Becht

The Communications Act of 19341 ("Communications Act") charges the Federal Communications Commission ("FCC" or "Commission") with the responsibility of ensuring that the electronic spectrum is used in a manner consistent with the public interest, convenience, and necessity.2 In so charging, Section 303 of the Communications Act requires the Commission to "[c]lassify radio stations . . . [a]nd [p]rescribe the nature of service to be rendered by each class."3 "An important element of public interest and convenience affecting the issue of a license is the ability of the licensee to render the best practicable service to the community . . . ."4

When determining whether a service is within the public interest, convenience, and necessity, the Commission must examine services proposed for the electronic spectrum and determine the composition of the traffic on the airways.5 Until recently, the Commission allocated frequency bands for specific services.6 Only after allocating the bands did the Commission issue licenses. The Commission's new trend is to grant licenses, through competitive bidding, without defining a specific service the licensee is required to provide.

On August 2, 1995, the Commission created the General Wireless Communications Service ("GWCS"); GWCS is defined as any Fixed7 or Mobile services8 that are not Broadcast, Radiolocation,9 or Satellite services (including Mobile Satellite service).10 The Commission assigned this new service to the 4660-4685 MHz band, which had been recently reallocated from government use to the private sector. Licenses for GWCS will be awarded through the competitive bidding process.11

This Comment examines the Commission's decision to create the GWCS, its decision to award licenses for the service by auction and whether by doing so, it has impermissibly delegated its authority to control the spectrum to the private sector. Part I discusses the reallocation of the 4660-4685 MHz band from government use to the private sector and includes a brief history of competitive bidding. Part II

---

7 "Fixed service" is defined by the Commission as a radio communication service between specified fixed points. See In re Allocation of Spectrum Below 5 GHz Transferred from Government Use, Second Report and Order in ET Dkt. No. 94-32, FCC 95-319, para. 61 (Aug. 2, 1995) [hereinafter Second Report and Order].
8 Section 153(n) of the Communications Act defines Mobile Service as "a radio communication service carried on between mobile stations or receivers and land stations, and by mobile stations communicating among themselves, and includes both one-way and two-way radio communication services." 47 U.S.C. § 153(n) (1994).
9 The Commission defines Radiolocation as "Radiodetermination used for purposes other than those of radio navigation" and Radiodetermination as "the determination of position, or the obtaining of information relating to position, by means of the propagation of radio waves." 47 C.F.R. § 90.7 (1994).
11 The GWCS spectrum is scheduled to be auctioned in the third quarter of 1996. FCC Chairman Reed E. Hundt, Remarks at a VIP Luncheon of Phillips Business Information, Inc. (Aug. 25, 1995) (transcript available in the FCC's library).
examines the process by which the Commission created the GWCS, the proposed rules, and comments filed by various parties. Part III evaluates the Commission’s rules in light of the Communications Act and fundamental administrative law. This Comment concludes that the Commission has impermissibly delegated its authority to control the radio spectrum to private entities. This Comment further concludes that the Commission is establishing a dangerous precedent by awarding licenses by auction without first assigning a specific service to the spectrum.

I. HISTORICAL OVERVIEW

A. Comparative Hearings, Random Selection, and Competitive Bidding

Historically, when broadcast licenses were sought by more than one party, the FCC conducted administrative hearings (comparative hearings) to determine which applicant would best serve the public interest, convenience, and necessity. In comparative hearings, the Commission examined each applicant and compared them based on the following criteria: diversification of media control, integration of management and ownership, previous broadcast experience, character, financial capability and minority ownership. Comparative hearings were scrutinized in the early 1980s because they were time consuming and expensive for both the government and applicants. Commenters argued that comparative hearings “require hair-splitting speculative judgments about which applicant is most qualified.”

In response to the criticism surrounding the comparative hearing process, Congress authorized the use of random selection (lotteries) to choose between mutually exclusive applicants. Lotteries also proved problematic. Parties often filed “cookie-cutter” applications to increase their chances of winning licenses in order to sell the bare licenses and thereby receive great windfalls. An alternative method of issuing licenses was needed.

The Omnibus Budget Reconciliation Act of 1993 ("Budget Act") added Section 309(j) to the Communications Act granting the Commission limited authority to use competitive bidding (auctions) to award licenses among mutually exclusive applicants. Before auctioning spectrum, the FCC must first determine if there is a reasonable likelihood that the principal use of the spectrum will involve subscriber-based services. Subscriber-based services are those services where the licensee charges the subscriber for providing the service. The FCC’s auctions mirror regular auctions by essentially awarding licenses to the highest bidder.

B. Reallocation of Spectrum by Congressional Mandate

In 1993, Congress also determined that the FCC has been forced to "postpone or forgo spectrum assignments for worthwhile uses and technologies" because of the limited unassigned, usable spectrum.

---

15 Wimmer & Tiedrich, supra note 6, at 18; see also supra notes 3-4.
16 In Metro Broadcasting v. FCC, 110 S. Ct. 2997 (1990), the Court upheld the FCC’s decision to grant preferences to applicants based on race, ethnicity or surname, but refused to rule on its policy of preferring applicants based on sex. In 1992, the U.S. Court of Appeals for the District of Columbia Circuit found the Commission’s policy of awarding credits to women was in violation of the U.S. Constitution’s Equal Protection Clause. Lamprecht v. FCC, 958 F.2d 382 (D.C. Cir. 1992).
17 Wimmer & Tiedrich, supra note 6, at 19 (citing Kurt A. Wimmer, Netting Federal Revenues from Thin Air: Issuing Spectrum Licenses by Auction, COMM. LAW., Summer 1993, at 12).
21 Id.
22 Id.
23 The legislative history of the Reconciliation Act demonstrates that Congress was concerned with the affects of spectrum congestion on emergency services. H.R. Rep. No. 111, 103d Cong., 1st Sess., at 250 (1993). Specifically, Congress noted that the FCC was forced to reallocate two MHz of spectrum that had been utilized, on a secondary basis, by the Amateur Radio Service. Id. The Amateur Radio Service had "established an impressive record of providing life-saving emergency communications during natural disasters and accidents, when more conven-
The spectrum assigned to the private sector was inadequate to accommodate the demand. The “public interest requires many of the reserved frequencies to be utilized more efficiently by Government or commercial operators.” However, unlike the private sector, the government never implemented procedures to ensure spectrum efficiency despite the fact that nearly one half of the entire spectrum was reserved solely for government use. In 1993 Congress put an end to this inefficiency by reclaiming portions of the spectrum for non-government use.

The Reconciliation Act required the Secretary of Commerce to identify 200 MHz of spectrum below 5 GHz presently allocated for government use that could be allocated for non-government use. The frequencies must be available to FCC licensees in at least eighty percent of the United States, including as many metropolitan areas as possible. The Reconciliation Act also required the Secretary to issue a report within six months of its enactment, giving a preliminary identification of reallocable spectrum and identifying at least 50 MHz of spectrum immediately available for reallocation. The remaining reallocable spectrum must be made available within ten years.

The Secretary released its report making a preliminary identification of spectrum for reallocation on February 10, 1994. The frequency bands identified as immediately available for reallocation were 2390-2400 MHz, 2402-2417 MHz, and 4660-4685 MHz. The Commission had eighteen months from the enactment of the Reconciliation Act (February 10, 1993) to assign services to these frequencies.

II. ET DOCKET 94-32: THE COMMISSION CREATES THE GENERAL WIRELESS COMMUNICATIONS SERVICE

On May 4, 1994, the Commission released a Notice of Inquiry (“NOI”) requesting comments on how to assign the reallocated frequencies. The Commission’s goal was “to ensure that spectrum reallocated for private sector use will provide for the introduction of new services and the enhancement of existing services.” It sought comment on the most appropriate non-federal use of the bands, including
any suggested restrictions that should be placed on their use. The Commission also requested that commenters discuss the needs of the public safety communications systems.\textsuperscript{56}

On November 8, 1994, the Commission released a Notice of Proposed Rule Making proposing to allocate all three bands, the entire 50 MHz, to both Fixed and Mobile services instead of limiting the allocation to one specific service.\textsuperscript{97} According to the Commission, a flexible general allocation which would allow market forces to determine the types of services that licensees should provide would best serve the public.\textsuperscript{98} Also, the Commission believed that “under [this flexible] approach most of the services to be provided in this spectrum would likely meet the statutory criteria for auctions.”\textsuperscript{99}

Ninety comments and fifty-two reply comments were filed in response to the Notice of Proposed Rule Making.\textsuperscript{40} All but three of these commenters opposed the Commission’s proposal.\textsuperscript{41} However, the Commission still proposed that “based on the record of this proceeding . . . an approach that provides spectrum for both unlicensed devices and Fixed and Mobile services would best serve the public interest.”\textsuperscript{42}

On February 7, 1995, the Commission adopted a First Report and Order and Second Notice of Proposed Rule Making (“First Report and Order and Second NPRM”).\textsuperscript{43} Under its proposal, the Commission allocated the 2390-2400 MHz band for use by unlicensed PCS.\textsuperscript{44} The 2402-2417 MHz band will continue to be used by Part 15 devices\textsuperscript{45} and is also apportioned to Amateur services,\textsuperscript{46} while the 4660-4685 MHz band will be used for Fixed and Mobile services.\textsuperscript{47} The Commission purported that the public will receive the greatest benefit by allocating the band to Fixed and Mobile services whether those services be private, non-subscriber, or subscriber based.\textsuperscript{48} Licensees may provide any Fixed or Mobile service that is not Broadcast, Radiolocation, or Satellite service, including Mobile Satellite services.\textsuperscript{49} The Commission reasoned that this broad allocation will afford licensees the opportunity to meet the spectrum needs of consumers.\textsuperscript{50}


43 First Report and Order and Second NPRM, supra note 10, para. 6.

44 See id.

45 First Report and Order and Second NPRM, supra note 10, para. 32.

46 Id. para. 16. PCS is defined as “a family of mobile or portable radio communications services which could provide services to individuals and business” anytime, anywhere. See In re Amendment of the Commission’s Rules to Establish New Personal Communications Services, Notice of Proposed Rule Making and Tentative Decision, 7 FCC Rcd. 5676, para. 29 (1992).

47 Part 15 of the Commission’s rules provides for the operation of unlicensed low-power devices which include, but are not limited to, auditory assistance, biomedical telemetry, cable locating equipment, cordless telephones, television broadcast receivers and wireless LANs. 47 C.F.R. § 15.1 (1994).

48 First Report and Order and Second NPRM, supra note 10, para. 41.

49 Id. para. 6.

50 Id. para. 60.
of allocation.\textsuperscript{61} For example, the American Petroleum Institute ("API") and the Association of Public-Safety Communications Officials-International, Inc. ("APCO")\textsuperscript{62} both asserted that auctions should not be used to allocate spectrum resources between different types of services, such as Commercial and Private, or Fixed and Mobile services.\textsuperscript{63} These service providers often times do not have the capital to compete with for-profit commercial entities when spectrum is auctioned.\textsuperscript{64} API asserted that by auctioning this spectrum, private users and state and local government public safety agencies were precluded from participating; a consequence in direct contradiction to the congressional mandate.\textsuperscript{65} API emphasized that "[t]he [Reconciliation] Act requires the Commission to implement an allocation and assignment plan which accounts for 'the safety of life and property in accordance with the policies of Section 1 of the 1934 Act (47 U.S.C. § 151)."\textsuperscript{66} API and The Association for Maximum Service Television ("MSTV") proposed allocating the 4660-4685 MHz band for broadcast auxiliary services in order to support digital advanced television and relieve congestion on the 1990-2110 MHz band.\textsuperscript{57}

API submitted that there is a distinction between allocating spectrum and awarding licenses and that "auctions are permitted only to assign licenses, not to determine spectrum allocations."\textsuperscript{67} The Commission should decide what services should be provided, and where on the spectrum they should sit, based on the public interest, convenience, and necessity. Awarding licenses should also be done in the public interest, convenience and necessity, and Congress has found that these interests can be served through the auction process.\textsuperscript{68}

API argued that the Commission’s proposal to auction spectrum for a range of services blurs this distinction.\textsuperscript{69} Although the FCC has limited authority to award licenses by auction when there are mutually exclusive applications,\textsuperscript{70} as API argues, Congress gave the Commission only limited authority to hold auctions in order to assign licenses. This authority does not extend to the power to determine spectrum allocations.\textsuperscript{71}

Before the Commission is permitted to award licenses by auction, it must determine that the “principal use of the spectrum will involve, or is reasonably likely to involve the licensee receiving compensation from subscribers.”\textsuperscript{72} MSTV suggested that the Commission had no basis in the record for asserting that the principal use for the 4660-4685 MHz band will be subscriber based.\textsuperscript{73} In response, the Commission asserted its policy of determining the principal use of a service by comparing the amount of non-subscription use made, or likely to be made, by a licensee, with the amount of subscriber-based use for a particular service.\textsuperscript{74} If the subscriber-based use is likely to be more than the non-subscriber-based use, then spectrum for that service may be auctioned.\textsuperscript{75} The Commission found that it was likely that the majority of services within the GWCS would be subscriber-based.\textsuperscript{76} The Commission apparently relied

\begin{itemize}
\item APCO is the nation's oldest and largest public safety communications organization, with over 11,000 members involved in the management and operation of law enforcement, fire, emergency medical, disaster relief, highway maintenance, forestry-conservation, and other public safety communications facilities. APCO is the FCC's certified frequency coordinator for the Part 90 Police Radio Service, Local Government Radio Service, and Public Safety Pool channels.
\item See API Comments, supra note 51, at 1.
\item See API Comments, supra note 51; APCO Comments, supra note 52.
\item See API Comments, supra note 51.
\item Id.
\item Id. at 3 (citing, Omnibus Reconciliation Act of 1993, Title VI, Part B, § 115(b)(1)(c) (1993)).
\item Initial API Comments, supra note 41, at 4; MSTV Comments, supra note 51, at 4.
\item API Comments, supra note 51, at 5; see also 47 U.S.C. 309(j)(6)(A) (1994).
\item H.R. Rep. No. 66.
\item API Comments, supra note 51, at 11.
\item Omnibus Budget Reconciliation Act § 6002.
\item API Comments, supra note 51, at 2.
\item Omnibus Budget Reconciliation Act § 6002.
\item MSTV Comments, supra note 51, at 5.
\item First Report and Order and Second NPRM, supra note 10, para. 64. Competitive bidding may only be used to assign licenses if the “principal use” of the spectrum was likely to involve the transmission or reception of communications signals to subscribers for compensation. See 47 U.S.C. § 309(j)(2)(A); see also In re Implementation of Section 309(j) of the Communications Act — Competitive Bidding, Second Report and Order, 9 FCC Rcd. 2348, 2354, para. 30 (1994), reconn., Second Memorandum Opinion and Order, 9 FCC Rcd. 7245 (1994).
\item First Report and Order and Second NPRM, supra note 10, para. 65.
\item Id. para. 66.
\end{itemize}
on those comments which suggested that the spectrum should be allocated for various subscriber-based services such as wireless cable, wireless local loop services and interactive video, among others.68

However, the Commission’s assumption that the principal use of the spectrum will be subscriber-based is unsubstantiated. Several commenters proposed that the spectrum will also be used for non-subscriber-based services, such as emergency services and private microwave.69 API and APCO both asserted that the spectrum should be allocated for emergency services and other commenters, including Bell Atlantic, supported private services such as private dispatch and private microwave services.70

The House Committee Report addressing Section 309(j) states that “the FCC cannot base an allocation decision . . . solely or predominantly on the expectation of more revenues.”71 The Commission’s proposed rules suggest that it has allocated the spectrum for GWCS and defined GWCS in a way that would inevitably result in auctioning the spectrum. The Commission has only excluded three services, Broadcast, Radiolocation, and Satellite, from competitive bidding.72 By carving out these areas, the Commission suggests that its purposes in making the GWCS allocation was to ensure that it would be subject to the auction process.

In response to this argument, the Commission asserted that this type of allocation was permissible because it was in the public’s interest and, in addition, falls within its broad discretion when allocating spectrum.73 The Commission also stated that it was not precluded from assigning spectrum to stations for more than one permissible use or in a manner in which it otherwise deemed to be in the public interest.74 Indeed, nothing in the language of the Communications Act or its legislative history limits the “Commission’s discretion to prescribe the nature of the service to be rendered over radio frequencies or its authority to assign (or allocate) frequencies to the various classes of stations.”75

On July 31, 1995 the Commission adopted its proposal creating the GWCS and promulgated rules for the licensing of the service in the 4660-4685 MHz band.76 As proposed, the Commission will issue licenses under GWCS for the provision of any service other than Broadcast, Radiolocation, and Satellite services, including the Mobile Satellite service.77 In addition, the Commission concluded that in light of the comments submitted, the principal use of the spectrum under the GWCS would be for subscriber-based services; therefore, licenses for GWCS will be awarded through the competitive bidding process.78

In response, MSTV filed comments arguing that “GWCS will be plagued with interference problems caused from the operation of mutually-incompatible services.”79 The Commission disagreed. The Commission asserted that GWCS will foster the efficient use of the spectrum because licensees will be encouraged to use the spectrum under their licenses for a variety of purposes.80 According to the Commission, interference problems can be resolved through general non-interference standards and rules.81 The Commission claimed that barring Broadcast, Radiolocation and Satellite services has eliminated several geographic areas. Id. para. 56. Two of the five blocks will be assigned as national licenses, one will be assigned within five Regional Licensing areas and the remaining two will be based on Economic Area-like service areas. Id. The Commission has adopted the Bureau of Economic Analysis, Department of Commerce’s definition of Economic Areas and added three additional areas: Guam and the Northern Mariana Islands, Puerto Rico and the United States Virgin Islands, and America Somoa. Id. The Commission will award a total of 875 licenses. Id. Licensees seeking economic area-based licenses will be permitted to aggregate nationwide licenses. Id. In addition, an applicant that is a rural telephone company may be granted a license that is geographically partitioned from a separately licensed economic area, if the economic area applicant agrees in writing to a partition. Id.

---

69 See generally MSTV Comments, supra note 51, at 5; API Comments, supra note 51, at 4; Initial API Comments, supra note 41, at 6; APCO Comments, supra note 51, at 2.
70 API Comments, supra note 51, at 3-4; APCO Comments, supra note 51, at 2; Bell Atlantic Comments, supra note 68, at 5.
71 API Comments, supra note 51, at 5 (citing H.R. 103-66).
72 Broadcast services are excluded from the competitive bidding process because broadcasters do not receive compensation for transmitting their signals and, therefore, are non-subscription based.
73 First Report and Order and Second NPRM, supra note 10, para. 44.
74 Id.
75 Id. (emphasis in original).
76 Second Report and Order, supra note 7, para. 12.
77 The Commission intends to employ simultaneous multiple round auctions and sequential oral auctions. Id. para. 71.
78 MSTV Comments, supra note 51, at 3.
79 First Report and Order and Second NPRM, supra note 10, para. 14.
80 Id. para. 18.
sources of interference.\textsuperscript{83} Furthermore, licenses will be granted under the condition that users do not create unacceptable interference with other users.\textsuperscript{83} Whether the Commission is correct is a "wait and see" proposition.

III. FCC ALLOCATION IS BEYOND STATUTORY AUTHORITY

The Reconciliation Act of 1993 required the FCC to submit to the President and Congress a plan for distribution of the reassigned frequencies.\textsuperscript{84} This "plan must ensure the future availability of frequencies for new technologies and services . . . and allow for innovation and marketplace development that may affect the relative efficiencies of different spectrum allocations."\textsuperscript{85} Congress specifically stated that these new amendments were not intended to preclude the Commission from "allocating the bands of frequencies for specific purposes in future rule making proceedings [and] the Committee assume[d] that the Commission will take into account new developments, including new technologies and services developed after the report has been submitted . . ."\textsuperscript{86} Congress did not intend for the Commission to stop allocating the spectrum for specific purposes, nor to allow private parties to dictate the types of services that will be provided over the electronic spectrum. Congress intended the Commission to continue allocating spectrum to specific services, while focusing on new technologies and marketplace developments.\textsuperscript{87}

When Congress authorized the use of competitive bidding for awarding licenses, the FCC was still allocating spectrum for specific services. The Commission allocated spectrum to a particular service and then opened a filing window during which time applications for licenses to provide this service would be accepted. Nothing in the legislative history of competitive bidding indicates that Congress intended the FCC to change its practice of selecting services for bands of spectrum prior to awarding licenses.\textsuperscript{88}

Through competitive bidding, applicants would "bid for licenses to provide specific services rather than for a carte blanche opportunity to implement some service of their choice on a generic spectrum block."\textsuperscript{89} The Commission is using its limited authority to award licenses by auction to impermissibly allocate spectrum. The Commission should specify the type of service a licensee must provide on the frequency bands before it auctions licenses. As the comments above indicate, the record lacks evidence to substantiate that the principal use of the frequencies will be subscriber-based. To be eligible for a GWCS license, an applicant merely must not propose to provide Broadcast, Radiolocation, or Satellite services. The creation of the GWCS gives the appearance that the Commission is auctioning spectrum to the highest bidder for any service that is not one of the taboo three, in order to increase federal revenue.

IV. FCC IS IMPERMISSIBLY DELEGATING ITS AUTHORITY TO CONTROL THE ELECTRONIC SPECTRUM TO THE PRIVATE SECTOR

In determining whether an agency action is beyond its statutory authority, a reviewing court first must look at the agency’s enabling act and determine the agency’s standard.\textsuperscript{90} Next, the court must determine to whom the agency is delegating its authority.\textsuperscript{91} If the agency is sub-delegating to private parties, the delegation is prohibited.\textsuperscript{92}

Under the Communications Act, the FCC’s enabbling act, the standard the FCC must follow is to regulate the electronic spectrum in a manner consistent with the public interest, convenience, and necessity.\textsuperscript{93} The Supreme Court has stated that in interpreting this standard the Commission must look at develop standards ("codes") of fair competition. After the trade associations created the codes, they were approved by the President and were binding on the entire industry. Fox, supra note 90, at 25. In Carter v. Carter Coal Co., 298 U.S. 238 (1936), the Supreme Court found a statute permitting private groups to create minimum wage standards for an entire industry to be unconstitutional. In 1974, in National Cable Television Association, Inc. v. United States, 415 U.S. 336 (1974), the Court alluded to the Commission’s burden of determining the composition of traffic on the airways, and that it may not delegate this responsibility to individual broadcasters. The case was subsequently remanded to the FCC for other reasons, and this issue was never addressed further.\textsuperscript{94}

\textsuperscript{83} Id.
\textsuperscript{84} Id.
\textsuperscript{86} Id. at 270.
\textsuperscript{87} Id. at 269.
\textsuperscript{88} See generally H.R. Rep. No. 111.
\textsuperscript{89} Wimmer & Tiedrich, supra note 6, at 19.
\textsuperscript{90} See generally William F. Fox, Jr., UNDERSTANDING ADMINISTRATIVE LAW 29 (2d. ed. 1992).
\textsuperscript{91} Id.
\textsuperscript{92} Id. at 31. In Schechter Poultry Co. v. United States, 295 U.S. 495 (1935), the Supreme Court found that Congress had impermissibly authorized trade associations, private bodies, to
the context of the situation. Therefore, the Commission cannot determine whether an action is within the public interest, convenience and necessity unless it knows the type of service being provided. Under the GWCS, the Commission only knows what services are not being provided to the public.

The Communications Act permits the FCC to delegate its authority to integrated bureaus, panels of commissioners, individual commissioners, and employees. Nothing in the Communications Act, its legislative history or prior case law indicates that the Commission may delegate its responsibilities to private entities. However, through its new order, the Commission is delegating its control over the spectrum to private parties. Licensees will determine the services to be provided in the 4660-4685 MHz band of spectrum. The Commission has no way of knowing whether a proposed service is within the public’s interest, convenience and necessity. By its own rules, the Commission does not even examine an applicant’s proposed service before it awards a license.

The Commission stated in the First Report and Order and Second NPRM that it “ha[s] no intention of abdicating [its] responsibility to provide a regulatory structure that is sufficient to provide for use of the spectrum that is in the public interest.” However, abdicating its responsibility appears to be exactly what it has done. The Commission cannot determine whether the spectrum will be used in the public interest without knowing the identity of the service to be provided.

In addition, the Commission stated that it will rely on market forces to determine whether a particular service is in the public’s interest. Theoretically, a service not required by the public and not supported by the public will not survive competition. The “invisible hand” of the marketplace is not sufficient to ensure that the radio spectrum is managed in a manner consistent with the public interest, convenience, and necessity.

Although the Commission is permitted to take market forces into account when allocating the spectrum, it cannot allow market forces to dictate spectrum allocations. There are many factors the FCC must take into account when it allocates spectrum. For example, radio interference is a very common problem between licensees. When the FCC allocates spectrum it takes into account different services and how their differing technologies work, or do not work, when placed adjacent to one another.

One purpose of the Communications Act is “to maintain the control of the United States over all the channels of radio transmission . . . ” The FCC must retain control of the spectrum in order to keep some semblance of order between the different services. Standardization of services is essential to maintaining spectrum order and efficiency.

An example of the importance of standardized services is cellular telephone service. The Commission made a nationwide allocation of the 824-849 MHz and 869-894 MHz frequency bands for cellular services. By doing so, cellular licensees have had the opportunity to enter into agreements to share their spectrum with other cellular licensees. If there was a cellular service operating at 824 MHz in Baltimore, Maryland, and a paging service was operating on this same band in Richmond, Virginia, the cellular user would interfere with the paging user if the cellular user tried to use her cell phone in Richmond. These sharing arrangements allow users to roam beyond their operators’ designated service areas. Today’s technology does not allow different services to simultaneously utilize frequencies in a given area. Therefore, these sharing arrangements are the most efficient way to use spectrum. Sharing arrangements will not be widely available under GWCS.
The Commission has stated time and time again in its Orders that this "flexible" spectrum allocation will foster an efficient use of the spectrum.\textsuperscript{107} Failing to account for shared spectrum plans by licensees is not an efficient use of the spectrum.

There is nothing in the Communications Act that limits the Commission's discretion in placing a new technology in an already occupied spectrum band. The Commission reallocated private microwave licensees when it determined that PCS would work more efficiently in that band of spectrum.\textsuperscript{108} The same could be done if the Commission assigned a specific service to the 4660-4685 MHz band and then determined another service would better serve the public interest.

The Commission is relying on the private sector and private licensees to utilize the spectrum in a manner consistent with the public interest. No evidence exists to support a conclusion that private entities will necessarily act in the public interest simply because these licensees have purchased very expensive licenses in order to make money. Inventing and implementing new services is both lucrative and precarious. In addition, it is an unsupported assumption that entities who have won licenses are interested in providing new technologies or in using the spectrum to enhance services already in existence unless it would be to their economic benefit. It is the Commission's responsibility to set aside spectrum for new services and ensure that these new services will serve the public interest.

V. CONCLUSION

By creating the General Wireless Communications Service and licensing it through competitive bidding the Commission has impermissibly delegated its control of the radio spectrum to the private sector. The Commission has a responsibility to ensure the spectrum is used in an efficient manner. Because the government was not using its spectrum efficiently, Congress ordered them to reallocate it for non-government use. Unfortunately, the Commission is not allocating the spectrum in an efficient manner. Standardizing services on assigned frequencies would permit licensees to share spectrum. However, the Commission has chosen not to standardize the services and will allow licensees to provide any service they wish as long as it is not a Broadcast, Radiolocation or Satellite service.

When Congress mandated reallocation of the spectrum for non-government use, it required that the Commission take into account the need for public safety and emergency services. The Commission has ignored the comments filed by APCO and API which address the need for additional spectrum so that existing safety and emergency services may be improved. Instead, the Commission has chosen to auction the spectrum for a broad range of uses, which effectively prevents these safety-oriented organizations from acquiring licenses. These organizations generally do not have the capital to compete for licenses with large for-profit corporations.

The Commission's new trend seems to be to sell spectrum to the highest bidder, and permit that licensee to provide any service it desires as long as the principal use of the service is likely to be subscriber-based. The Communications Act specifically states that the FCC is responsible for maintaining the spectrum in a manner consistent with the public interest, convenience, and necessity. The Commission needs to reexamine its definition of "maintaining the spectrum." It should include more than a sale to the highest bidder. The Commission seems to be interested more in auctioning spectrum and recovering funds for the Federal Treasury than in regulating the electronic spectrum. The Commission is the policing agent in charge of the radio spectrum, not a collection agency for the United States Government.

\textsuperscript{107} See generally First Report and Order and Second NPRM, supra note 10, para. 48; Second Report and Order, supra note 7, para. 12.
