Catholic University Law Review

Volume 37 Issue 1 *Fall 1987*

Article 8

1987

Allocating Spectrum by Market Forces: The FCC Ultra Vires?

Michael C. Rau

Follow this and additional works at: https://scholarship.law.edu/lawreview

Recommended Citation

Michael C. Rau, *Allocating Spectrum by Market Forces: The FCC Ultra Vires?*, 37 Cath. U. L. Rev. 149 (1988).

Available at: https://scholarship.law.edu/lawreview/vol37/iss1/8

This Comments is brought to you for free and open access by CUA Law Scholarship Repository. It has been accepted for inclusion in Catholic University Law Review by an authorized editor of CUA Law Scholarship Repository. For more information, please contact edinger@law.edu.

ALLOCATING SPECTRUM BY MARKET FORCES: THE FCC ULTRA VIRES?

The Communications Act of 1934 (the 1934 Act or the Act)¹ empowers the Federal Communications Commission (the FCC or the Commission) to regulate the use of radio frequency spectrum for broadcasting.² The Act prohibits the private ownership of spectrum³ and provides instead that the government shall maintain control over all radio channels.⁴ The Act instructs the FCC to assign frequencies,⁵ classify stations,⁶ and license radio and television stations in a manner consistent with the "public convenience, interest and necessity."⁷

Viewing the spectrum as a scarce public resource, courts have held that the Act treats licensees as "trustees" who serve the public interest in return for their privileged and regulated use of publicly owned radio spectrum.⁸ The Act thus embodies a "trusteeship" model of spectrum regulation.

^{1.} Pub. L. No. 73-416, 48 Stat. 1064 (1934) (codified as amended at 47 U.S.C. §§ 151-610 (1982)). Title III of the 1934 Act regulates radio communication including broadcasting. See 47 U.S.C. §§ 301-399.

^{2.} See infra notes 3-7 and accompanying text. "Radio frequency spectrum" can be thought of as a continuum of discrete frequencies that support radio communications. A "frequency" is a particular and predetermined number of electromagnetic oscillations per second (referred to as a cycle per second or "hertz"). Electromagnetic oscillations in radio transmitting apparatus produce radio waves that travel via an antenna "over the air" to be detected by a suitably equipped receiver. A "user" of spectrum is one who establishes a channel of radio communication by using a particular radio frequency or set of frequencies. See generally H. LEVIN, THE INVISIBLE RESOURCE: USE AND REGULATION OF THE RADIO SPECTRUM 15-26 (1971); Levin, The Radio Spectrum Resource, 11 J.L. & ECON. 433 (1968); M. Mueller, Property Rights in Radio Communication: The Key to Reform of Telecommunications Regulation 7-9 (June 3, 1982) (available at the CATO Institute, Washington, D.C.).

^{3. 47} U.S.C. § 301.

^{4.} *Id*.

^{5.} Id. § 303(c).

^{6.} Id. § 303(a).

^{7.} See, e.g., id. § 307(a).

^{8.} See generally Red Lion Broadcasting Co. v. FCC, 395 U.S. 367 (1969) (Court approves of scarcity rationale); National Broadcasting Co. v. United States, 319 U.S. 190 (1943) (1934 Act confers broad discretion on the Commission to regulate broadcasters in the public interest); Citizens Communications Center v. FCC, 447 F.2d 1201, 1214 (D.C. Cir. 1971) (overturning Commission policy statement on comparative renewals that violates the trusteeship model); Office of Communication of the United Church of Christ v. FCC, 425 F.2d 543, 548 (D.C. Cir. 1969) ("broadcasters are temporary permittees—fiduciaries—of a great public resource"); S. REP. No. 562, 86th Cong., 1st Sess. 8 (1959) (using scarcity rationale to justify the equal time provisions of § 315 of the Communications Act of 1934), reprinted in 1959 U.S. CODE CONG. & ADMIN. NEWS 2564, 2571; infra notes 40-54 and accompanying text.

Under this approach, licensees have no discretion to alter the principal type of communications service they provide without specific Commission approval. An alternative model, the "market system" model of spectrum allocation, is not expressly sanctioned by the 1934 Act. This model recognizes competition among services for the right to use spectrum as an equally viable approach to realize public interest goals. Rather than have the Commission decide (1) who is entitled to operate in specific portions of spectrum and (2) the manner in which the spectrum is used, a market system model of spectrum allocation relies on "market forces" to make these decisions. Under a pure marketplace approach, a maximum degree of private autonomy is granted to spectrum users and competition among the users would directly determine the nature of the spectrum's use. 11

After more than a half century of codification, the Commission is testing the limits of the trusteeship model by proposing and adopting "marketplace" regulatory alternatives.¹² Extensive deregulation of the broadcast industry by the Commission¹³ has increased the autonomy of broadcast licensees¹⁴

^{9.} See, e.g., Fowler & Brenner, A Marketplace Approach to Broadcast Regulation, 60 Tex. L. Rev. 207, 209 (1982) (urging replacement of the trusteeship model with a marketplace approach wherein broadcasters would be considered market participants).

^{10.} See infra notes 139-53 and accompanying text.

^{11.} Id.

^{12.} See, e.g., Fowler & Brenner, supra note 9, at 209; see also infra notes 13-15 and accompanying text.

^{13.} See Office of Communication of the United Church of Christ v. FCC, 707 F.2d 1413 (D.C. Cir. 1983) (upholding much of the FCC's elimination of radio station logkeeping, programming guidelines and ascertainment requirements); see also Deregulation of Radio, 84 F.C.C.2d 968 (1981), reconsideration granted in part, denied in part, 87 F.C.C.2d 797, aff'd in part, remanded in part sub nom. Office of Communication of the United Church of Christ v. FCC, 707 F.2d 1413 (D.C. Cir. 1983) (establishing quarterly issues/programs list recordkeeping requirement to enable public to evaluate whether station is operating in the public interest), on remand sub nom. Deregulation of Radio, 96 F.C.C.2d 930, recon. denied, 57 Rad. Reg. 2d (P & F) 93 (1984), vacated and remanded sub nom. Office of Communication of the United Church of Christ v. FCC, 779 F.2d 702 (D.C. Cir. 1985); Deregulation of Television, 98 F.C.C.2d 1076 (1984), clarified, 104 F.C.C.2d 358 (1986), aff'd in part, remanded in part, sub nom. Action for Children's Television v. FCC, 821 F.2d 741 (D.C. Cir. 1987) (upholding much of the Commission's TV deregulation but remanding the issue dealing with guidelines for children's programming).

^{14.} For examples of recent FCC decisions increasing the autonomy of broadcast licensees, see Broadcast Auxiliary Facility Sharing, 93 F.C.C.2d 570 (1983) (allowing licensees to lease "excess capacity" on auxiliary services, such as studio-to-transmitter links or mobile newsgathering telecommunications equipment); FM Subcarrier Authorizations, 53 Rad. Reg. 2d (P & F) 1519 (1983) (removing nearly all restrictions on use of FM subcarriers for broadcast or nonbroadcast purposes); Short Term Operation Without Prior Approval, 50 Rad. Reg. 2d (P & F) 1492 (1982) (permitting unlicensed operations of auxiliary broadcast facilities on a short term basis without prior FCC approval under authority conveyed by the main broadcast license). See generally Gellhorn, Deregulation: Delight of Delusion?, 24 ST. LOUIS U.L.J. 469 (1980) (elaborating on the many problems of regulation but concluding that regulation will

and reduced direct governmental control over their affairs.¹⁵ While the Commission lacks power to remove the basic statutory framework of the public interest standard,¹⁶ the more autonomy the Commission grants to its licensees the more its interpretation of the trusteeship model begins to resemble a pure marketplace approach. Because the 1934 Act embraced a trusteeship model, not a pure marketplace model, the courts eventually would be expected to find limits on the extent that the Commission can use "market" mechanisms as a spectrum allocation alternative. If the Commission were to go so far as to remove all restrictions on a licensee's use of spectrum, the "regulation" of spectrum in the public interest would begin to resemble a granting of statutorily prohibited property interests.¹⁷

None of the Commission's recent deregulatory initiatives, however, have granted broadcast licensees the autonomy to decide to change the principal use of Commission allocated spectrum from broadcasting to some other type of telecommunications service. Historically, such a decision rests exclusively with the Commission and cannot be changed at will by the licensee. 19

always be necessary unless society wishes to return to the "Law of the Jungle."); Webbink, The Recent Deregulatory Movement at the FCC, in TELECOMMUNICATIONS IN THE U.S.: TRENDS AND POLICIES 61 (L. Lewin ed. 1981) (discussing development of recent FCC deregulatory policies); Note, The Proposed Communications Act Rewrite: Potomac Deregulatory Fever v. The Public Interest, 48 U. CIN. L. REV. 476 (1979) (analyzing proposed amendments to the Communications Act of 1934 and finding none of them consistent with the author's view of the public interest).

- 15. For examples of FCC decisions reducing direct government control over a licensee's affairs, see Objectionable Loudness of Commercial Announcements, 56 Rad. Reg. 2d (P & F) 390 (1984) (terminating proceeding with decision not to issue regulations to control loudness of commercials); Elimination of Routine Broadcast Logging Requirements, 54 Rad. Reg. 2d (P & F) 805 (1983) (eliminating most logkeeping requirements deemed to be routine in nature); Elimination of Annual Financial Report of Broadcast Stations, 51 Rad. Reg. 2d (P & F) 135 (1982) (eliminating the requirement for broadcast licensees to annually report the financial condition of their stations). See Gellhorn, supra note 14, at 469-70.
- 16. See United Church of Christ, 707 F.2d at 1443 (strongly suggesting that Congress is the more appropriate body to undertake "significant deregulation"). But see Citizens Communications Center v. FCC, 447 F.2d 1201, 1209-10 (D.C. Cir. 1971) (describing the difficulties of seeking license renewal reform in Congress).
- 17. See infra notes 234-47 and accompanying text. Section 301 of the Communications Act of 1934 provides for the use of radio spectrum, "but not the ownership thereof." 47 U.S.C. § 301.
- 18. See supra notes 12-16 and accompanying text. Licensees do have discretion, however, over communications services the Commission determines to be "subsidiary" or "secondary" to the primary communications service using the spectrum allocation. In many instances, a licensee can use its secondary communications capability for virtually any lawful purpose. See, e.g., FM Subcarrier Communications Authorizations, 53 Rad. Reg. 2d (P & F) 1519 (1983) (use of inaudible FM subcarrier for nonbroadcast purposes); Use of the AM Carrier Signal, 100 F.C.C.2d 5 (1982) (use of inaudible tones for nonbroadcast purposes); see also infra notes 240-45 and accompanying text.
 - 19. See R. SMALL, A COMPARISON OF ALTERNATIVE SPECTRUM REGULATORY AP-

Thus, the holder of a television license must engage in television broadcasting and cannot switch to another type of service. However, the Commission has promulgated an innovative proposal to establish a "flexible radio service" that would, for the first time, permit licensees to unilaterally alter the type of service provided in spectrum presently allocated for UHF television broadcasting on channels 50-59.²⁰ This proposal sets forth a new kind of marketplace autonomy for spectrum users that challenges the limits of the trusteeship model of radio spectrum allocation.²¹

This Comment analyzes the flexible radio service proposal and questions whether, under such a system, spectrum users would, in fact, serve as trustees of the public airwaves, or whether they would act more like owners of spectrum in derogation of the trusteeship model. The Commission's proposal raises several specific legal issues. First, a flexible radio service is prohibited if it grants a property interest in spectrum.²² Second, implementation of a flexible radio service raises troublesome issues of whether newcomers to the broadcast spectrum would be afforded adequate opportunity to exercise their statutory right to challenge incumbent licensees at the time of a change in communication service.²³ Finally, the proposal raises several practical difficulties that, if not accommodated, could prejudice existing spectrum users and pose significant administrative problems for the Commission.²⁴ But beyond these difficulties, the integrity of the trusteeship model is at

PROACHES 2 (Office of Science and Technology, Federal Communications Commission Report No. 82-1, 1982). This report classifies spectrum regulation using a six-tier hierarchy: (1) international restrictions and applicable decisions; (2) government or nongovernment communications; (3) FCC spectrum use classification (for example, broadcast or common-carrier); (4) FCC user classifications; (5) system design technical constraints; and (6) spectrum loading standards. At issue in this commentary is the extent that market forces can determine spectrum use classification. See infra notes 159-210 and accompanying text.

- 20. See Further Sharing of the UHF Television Band by Private Land Mobile Radio Services, 50 Fed. Reg. 25,587, 25,595-98 (to be codified at 47 C.F.R. pt. 2) (proposed June 20, 1985), reprinted in 101 F.C.C.2d 852 (1985) [hereinafter UHF Notice]. UHF television currently occupies television channels 14-69 (470-806 MHz). 47 C.F.R. § 73.603(a) (1986); see also Spectrum for Land Mobile Services, 19 Rad. Reg. 2d (P & F) 1663 (1970) (reallocating 806-890 MHz (formerly UHF channels 70-83) for use by land mobile communications services); Land Mobile Spectrum Allocations, 23 F.C.C.2d 325 (1970) (permitting land mobile communications services to "share" UHF channels 14-20 within 50 miles of the 10 largest markets); Engineering Standards Concerning the Television Broadcast Service, 41 F.C.C. 148, 154-58 (1952) (allocating 470-890 MHz (channels 14-83) for use by UHF television); infra notes 122-53 and accompanying text.
 - 21. See UHF Notice, supra note 20, at 25,595.
- 22. See 47 U.S.C. § 301; see also FCC v. Sanders Bros. Radio Station, 309 U.S. 470, 475 (1940) ("The policy of the Act is clear that no person is to have anything in the nature of a property right as a result of the granting of a license."); infra notes 234-47 and accompanying text.
 - 23. See infra notes 248-61 and accompanying text.
 - 24. See infra notes 283-91 and accompanying text.

stake; the model will mean little if, as a practical matter, the actions of licensees are not subject to any type of government approval.²⁵ However, since today's telecommunications world differs considerably from the one encountered by the drafters of the 1934 Act, the establishment of a flexible radio service may solve several of the acknowledged problems associated with the current system of spectrum allocation.²⁶

This Comment first examines whether the Commission has the statutory authority to establish a flexible radio service. It begins by briefly describing the history of the current FCC allocation policies and the statutory framework of Commission spectrum allocation decisions. It then discusses previously proposed systems of spectrum "markets" and compares them with the Commission's current proposal. Against this background, this Comment analyzes the flexible radio service and studies the legal questions posed by its implementation. Specifically, the proposal may transgress the spirit, if not the letter, of the trusteeship model established by the 1934 Act. This Comment concludes that the Commission should either abandon its proposal or obtain clarifying statutory authority from Congress allowing the Commission to inaugurate a flexible radio service.

I. STATUTORY FRAMEWORK OF SPECTRUM ALLOCATION DECISIONS

A. Statutory History and the Public Interest Standard

Government allocation of radio frequency spectrum began when Congress enacted the Radio Act of 1912.²⁷ Congress responded to widespread technical interference problems²⁸ that had arisen among mutually exclusive government, commercial, and amateur uses of spectrum.²⁹ The Secretary of

^{25.} See id.; Office of Communication of the United Church of Christ v. FCC, 707 F.2d 1413, 1443 (D.C. Cir. 1983).

^{26.} See infra notes 74-82 and accompanying text.

^{27.} Act of Aug. 13, 1912, ch. 287, 37 Stat. 302, repealed by Radio Act of 1927, ch. 169, 44 Stat. 1174, repealed by Communications Act of 1934, ch. 652, § 602(a), 48 Stat. 1064, 1102. An even earlier act, the Wireless Telegraphy Act of 1910, ch. 379, 36 Stat. 629, did not allocate spectrum at all but merely required ocean going ships to possess radio transmitting apparatus. See generally J. Robinson, Spectrum Management Policy in the United States: An Historical Account (Federal Communications Commission Office of Plans and Policy Working Paper No. 15, 1985) (analyzing the various problems inherent in the current system of frequency allocation).

^{28.} When two or more radio transmitters use the same frequency at the same time, interference will be perceived on that frequency by a radio receiver capable of hearing both stations. Neither station will be heard satisfactorily. Alleviating radio interference is a principal justification for the regulation of broadcasting. See Red Lion Broadcasting Co. v. FCC, 395 U.S. 367, 376 (1969); see also M. Mueller, supra note 2, at 8-9.

^{29.} See J. Robinson, supra note 27, at 10, 12-14. The uses of spectrum at this time were largely for telegraph and morse code purposes. The technology of voice communications was

Commerce granted the first radio broadcast licenses in the early 1920's pursuant to the 1912 Act.³⁰ As commercial radio broadcasting developed, the demand soon exceeded the supply of available frequencies.³¹ The Secretary had no power, however, to deny an application to use a radio frequency and consequently a serious overcrowding condition arose.³² On-air radio stations interfered with each other at will.³³ Congress recognized that new legislation was required to assure the orderly and interference-free development of commercial radio broadcasting.³⁴

Congress subsequently enacted the Radio Act of 1927,³⁵ largely to solve the problem of widespread interference caused by the proliferation of commercial radio broadcasts.³⁶ The 1927 Act created a Federal Radio Commission (FRC) with the power to assign frequencies, classify stations, prescribe service and reduce interference.³⁷ The FRC was to exercise these powers as the "public convenience, interest, or necessity" required.³⁸ In 1934, Congress enacted the Communications Act of 1934 largely to consolidate regulation over all forms of communication.³⁹

still in the process of development. See S. REP. No. 698, 62d Cong., 2d Sess. 7 (1912); see also Metzger & Burrus, Radio Frequency Allocation in the Public Interest: Federal Government and Civilian Use, 4 Duq. L. Rev. 1, 3-8 (1965-66).

- 30. Radio Act of 1912, ch. 287, §§ 1-2, 37 Stat. 302-03.
- 31. Initially, only two frequencies were allocated to support what became several hundred stations. See Metzger & Burrus, supra note 29, at 5.
- 32. See Hoover v. Intercity Radio Co., 286 F. 1003 (D.C. Cir. 1923). All the Secretary could do was assign frequencies thought to cause the least amount of interference. *Id.* at 1007; see also Metzger & Burrus, supra note 29, at 7; J. Robinson, supra note 27, at 17.
- 33. See Coase, The Federal Communications Commission, 2 J.L. & ECON. 1, 5 (1959). In United States v. Zenith Radio Corp., 12 F.2d 614 (N.D. III. 1926), the court held that the Secretary of Commerce was without authority to penalize stations that refused to operate on their assigned frequencies. Id. at 618. Thus, following Zenith, the Secretary of Commerce lost all regulatory power. See Metzger & Burrus, supra note 29, at 7-8; Note, The Crisis in Electromagnetic Frequency Allocation: Abatement Through Market Distribution, 53 IOWA L. Rev, 437, 449 (1967).
 - 34. See J. Robinson, supra note 27, at 17-21.
- 35. Ch. 169, § 6, 44 Stat. 1162, repealed by Communications Act of 1934, ch. 652, § 602(a), 48 Stat. 1064, 1102 (codified as amended at 47 U.S.C. §§ 70-79 (1986)).
- 36. See National Broadcasting Co. v. United States, 319 U.S. 190, 213 (1943); see also Metzger & Burrus, supra note 29, at 9-12.
- 37. Radio Act of 1927, §§ 3-4, 6; see also Metzger & Burrus, supra note 29, at 10. Government owned and operated stations were exempt from FRC regulation. See Radio Act of 1927, § 6.
- 38. Radio Act of 1927, §§ 4, 9, 11, 21. See generally Caldwell, The Standard of Public Interest, Convenience or Necessity as Used in the Radio Act of 1927, 1 AIR L. REV. 295, 301-02 (1930) (analyzing the phrase "public interest, convenience, and necessity").
- 39. See Pub. L. No. 73-416, 48 Stat. 1064 (1934) (codified as amended at 47 U.S.C. §§ 151-610 (1982)); Robinson, Radio Spectrum Regulation: The Administrative Process and the Problems of Institutional Reform, 53 MINN. L. REV. 1179, 1182-83 (1969). The 1927 Act did not apply to stations owned by the government. At the time, wire communications—

The 1934 Act established the Federal Communications Commission and incorporated virtually all of the 1927 Act's regulatory structure as it pertained to regulation of radio broadcasting.⁴⁰ The Act empowers the Commission to control the use of radio spectrum⁴¹ and to license radio stations in the "public convenience, interest, or necessity,"⁴² for limited periods of time, ⁴³ such that the Commission may provide a "fair, efficient and equitable distribution of radio service"⁴⁴ for all "communities."⁴⁵ Because licenses to use radio spectrum are granted only for limited time periods, ⁴⁶ broadcast licensees are required periodically to apply for renewal of the license. Renewal applications may be granted if the "public interest" is served.⁴⁷ The Act permits interested parties to file petitions to deny an incumbent's application for license renewal and to urge the Commission to find that a grant of a renewal application would not serve the public interest.⁴⁸

The Supreme Court broadly approved the trusteeship model of spectrum regulation in the landmark case of NBC v. United States. 49 The Supreme

- 42. 47 U.S.C. § 307(a).
- 43. Id. § 307(c).
- 44. Id. § 307(b).

telephone and telegraph—were administered by the Postmaster General. See S. REP. No. 781, 73d Cong., 2d Sess. 1 (1934).

^{40.} See Metzger & Burrus, supra note 29, at 13; Robinson, supra note 39, at 1183. In 1982, Congress reduced the number of Commissioners from seven to five. Omnibus Budget Reconciliation Act of 1982, Pub. L. No. 97-253, § 501, 96 Stat. 805 (1982) (amending 47 U.S.C. § 154 (1982)).

^{41. 47} U.S.C. § 301 (1982) (providing for the Commission to "maintain the control . . . over all channels of radio transmission"), see supra notes 3-7 and accompanying text.

^{45.} Id. The appropriate definition of "community" is somewhat controversial. See FCC, REPORT ON THE STATUS OF THE AM BROADCAST RULES 40-44 (1986); see also Suburban Community Policy, 93 F.C.C.2d 436, 437 (1982) (eliminating the so-called "Berwick" doctrine and "de facto reallocation" policies that had been designed to deter FM radio stations from de facto changing their community of license by changing the location of the station's transmitter). The Commission believes that § 307(b) is applicable only to broadcast stations. See AnsweRite Professional Telephone Service, 68 F.C.C.2d 1473, 1476 (1977) (rejecting contention that the § 307(b) "fair, efficient and equitable distribution" requirement prevents Commission from assigning two frequencies for paging service to a smaller community than a community assigned only one paging frequency); Orange County Radiotelephone Service, 5 F.C.C.2d 848, 850 (1966) (majority of Commission determines that the legislative history of § 307(b) demonstrates that the section only applies to broadcast service).

^{46. 47} U.S.C. § 307(c). In 1981, Congress amended the 1934 Act to specify five-year renewal terms for television stations and seven-year terms for radio. Omnibus Budget Reconciliation Act of 1981, Pub. L. No. 97-35, § 1241, 95 Stat. 736 (1981).

^{47. 47} U.S.C. § 309(a).

^{48.} Id. § 309(d); see also Office of Communication of the United Church of Christ v. FCC, 359 F.2d 994 (D.C. Cir. 1966).

^{49. 319} U.S. 190 (1943). The National Broadcasting Company (NBC) challenged the Commission's authority to regulate radio broadcast networks. As program suppliers to licensed radio stations, networks were not directly licensed themselves. *Id.* at 193-98, 209-10.

Court affirmed the FCC's authority to bring radio broadcast networks within the umbrella of FCC jurisdiction.⁵⁰ The Court held that the 1934 Act confers broad power upon the FCC to regulate broadcasters in the public interest.⁵¹ Relying on the oft-cited and sometimes criticized "scarcity" rationale, the Court reasoned that government regulation is justified because the electromagnetic spectrum can support only a limited number of users.⁵² While Congress has amended the 1934 Act on several occasions,⁵³ the trusteeship model upheld in *NBC*, with its fundamental prescription for the FCC to allocate spectrum and license stations in the public convenience, interest, or necessity, remained unchanged.⁵⁴

The public interest standard confers broad discretion on the Commission to regulate the frequencies used for broadcasting.⁵⁵ In *NBC*, the Court re-

^{50.} Id. at 224.

^{51.} Id. at 219. The Court used the dynamic aspects of radio technology to justify provisions of a broad mandate to foster radio development yet assure service in the public interest. Id.

^{52.} See FCC v. National Citizens Comm. for Broadcasting, 436 U.S. 775 (1978); CBS v. Democratic Nat'l Comm., 412 U.S. 94, 101, 103-14 (1973); Red Lion Broadcasting Co. v. FCC, 395 U.S. 367, 388-89 (1969); NBC, 319 U.S. at 212-13, 226. But the scarcity rationale has increasingly been criticized, and there are indications that its formerly immutable character may be changing. See FCC v. League of Women Voters, 468 U.S. 364, 376 n.11 (1984) (implying that a "revision" of the system of broadcast regulation might be entertained with "[s]ome signal from Congress or the FCC that technological developments have advanced"); see also Fowler & Brenner, supra note 9, at 221-26; M. Mueller, supra note 2, at 6-12; Rossini, The Spectrum Scarcity Doctrine: A Constitutional Anachronism, 39 Sw. L.J. 827, 827-43 (1985).

^{53.} Recent substantive amendments to title III of the 1934 Act include the Cable Communications Policy Act of 1984, Pub. L. No. 98-549, §§ 1-9, 98 Stat. 2780 (codified as amended at 47 U.S.C. §§ 521-559 (Supp. III 1985)) (updates the 1934 Act to establish a national policy on cable television); Communications Amendments Act of 1982, Pub. L. No. 97-259, § 108, 96 Stat. 1091 (codified as amended at 47 U.S.C. § 302(a) (1982)) (grants FCC authority to establish interference rejection standards for electronic home entertainment equipment); and the Omnibus Budget Reconciliation Act of 1981, Pub. L. No. 97-35, ch. 2, § 1241, 95 Stat. 736 (amending 47 U.S.C. § 307(d) (1982)) (extends license terms for radio and television stations).

^{54.} See CBS, 412 U.S. at 94; Red Lion, 395 U.S. at 375-86. Section 303 of the 1934 Act provides that "the Commission from time to time, as public convenience, interest, or necessity requires, shall . . . (c) Assign bands of frequencies to the various classes of stations, and assign frequencies for each individual station and determine the power which each station shall use and the time during which it may operate." 47 U.S.C. § 303. For example, the FCC has allocated 88-108 MHz for FM Broadcasting. 47 C.F.R. § 73.201 (1986). For a review of the Commission's allocation system for VHF television, see Schuessler, Structural Barriers to the Entry of Additional Television Networks: The Federal Communications Commission's Spectrum Management Policies, 54 S. CAL. L. REV. 875 (1981).

^{55.} Such discretion applies not only to decisions that establish channels of communication, but also to the material communicated on those channels. See United States v. Midwest Video, 406 U.S. 649 (1972); United States v. Southwestern Cable Co., 392 U.S. 157 (1968); NBC, 319 U.S. at 215-16 ("The Act does not restrict the Commission merely to supervision of

jected the contention that the public interest standard is sufficiently vague to be an unconstitutional delegation of power.⁵⁶ The meaning of the standard in a particular case will depend on the nature and importance of relevant factors.⁵⁷ Thus, spectrum allocation decisions in the public interest are not intended for the benefit of licensees but are supposed to benefit the listening and viewing public.⁵⁸

B. Nature of Spectrum Allocation Decisions

Congress has delegated to the Commission the authority to decide the specific radio frequencies on which particular communications services will operate.⁵⁹ The Commission makes these decisions by using informal rulemaking proceedings under authority of the 1934 Act.⁶⁰

the traffic. It puts upon the Commission the burden of determining the composition of that traffic "); National Ass'n of Indep. TV Producers & Distribs. v. FCC, 502 F.2d 249, 256-58 (2d Cir. 1974) (FCC, in making public interest determinations, must place the public interest above private interests, and may not simply "compromise" among proceeding participants); see also J. Robinson, supra note 27, at 42-43; Chamberlin, Lessons in Regulating Information Flow: The FCC's Weak Track Record in Interpreting the Public Interest Standard, 60 N.C.L. Rev. 1057 (1982); Fowler & Brenner, supra note 9, at 215-16; Krugman & Reid, The Public Interest as Defined by FCC Policymakers, 24 J. BROADCASTING 311 (1980); Robinson, The Federal Communications Commission: An Essay on Regulatory Watchdogs, 64 VA. L. Rev. 169, 174 (1978) ("a grant of plenary power to the FCC to regulate electronic communications as it deems it appropriate").

- 56. NBC, 319 U.S. at 190.
- 57. FCC v. Sanders Bros. Radio Station, 309 U.S. 470 (1940); FCC v. Pottsville Broadcasting Co., 309 U.S. 134, 138 (1940) ("While [the public interest standard] is as concrete as the complicated factors for judgment in such a field of delegated authority permit, it serves as a supple instrument for the exercise of discretion "); see Federal Radio Comm'n v. Nelson Bros. Bond & Mortgage Co., 289 U.S. 266, 285 (1933) (public interest standard must be interpreted within context of factual and policy issues); Radio Relay Corp. v. FCC, 409 F.2d 322, 326 (2d Cir. 1969). As to the limits of the Commission's substantive discretion, it appears that the FCC's power can be expanded to suit the agency's purpose, even if such a purpose is not articulated in the Act. See Midwest Video, 406 U.S. at 649; Robinson, supra note 55, at 174. See generally Southwestern Cable, 392 U.S. 157 (sustaining jurisdiction of the Commission over cable television systems, at least to the extent "reasonably ancillary to the effective performance of the Commission's various responsibilities for the regulation of television broadcasting"); Greater Boston Television Corp. v. FCC, 444 F.2d 841 (D.C. Cir. 1970) (FCC has discretion "to select the policies deemed to be in the public interest"), cert. denied, 403 U.S. 923 (1971).
- 58. The Supreme Court has said that the public interest to be served is the interest of the listening public in the "larger and more effective use of radio." *NBC*, 319 U.S. at 216 (citing 47 U.S.C. § 303(g)); see also Citizens Comm. to Save WEFM v. FCC, 506 F.2d 246, 267-68 (D.C. Cir. 1974).
 - 59. 47 U.S.C. § 303.
- 60. The Commission may make such rules it believes necessary to implement the provisions of the 1934 Act, and has a great deal of discretion to adopt whatever procedures it deems most efficient. See, e.g., 47 U.S.C. §§ 154(j), 303(r), 403; see also United States v. Storer Broadcasting Co., 351 U.S. 192 (1956) (upholding power of Commission to establish rules that

Under the so-called "block" allocations system⁶¹ the FCC estimates the appropriate amount of spectrum for a specific communications service and allocates a block of frequencies for that service's use.⁶² These decisions are based on the FCC's assessment of the public's need for particular communications services,⁶³ the location in the spectrum most technically suitable for a particular radio service,⁶⁴ and the degree to which the technology employed may cause or receive undue interference.⁶⁵ In addition, allocation rulemaking proceedings frequently contain complex procedural issues addressing the methods the FCC proposes to use in licensing individual applicants.⁶⁶

For a variety of reasons, spectrum allocation proceedings are often contro-

characterize the scope of § 309(b) hearing requirements); Chisolm v. FCC, 538 F.2d 349, 364-66 (D.C. Cir.) (citing CBS v. FCC, 454 F.2d 1018, 1026 (D.C. Cir. 1971)) (FCC may overrule prior statute interpretations or reverse its own policy where it provides "an opinion or analysis indicating that the standard is being changed and not ignored, and assuring that it is faithful and not indifferent to the rule of law."), cert. denied, 429 U.S. 890 (1976). Courts have held that rulemaking pursuant to § 303(r) is subject to the requirements of § 4 of the Administrative Procedure Act, 5 U.S.C. § 553(e) (1982). See, e.g., Home Box Office, Inc. v. FCC, 567 F.2d 9, 34-35 (D.C. Cir. 1977). Specifically, members of the public must be afforded notice, an opportunity for comment, and a rationale for adoption of the final rules. See 5 U.S.C. § 553(c). Section 402 of the 1934 Act as amended provides for appeals to the District of Columbia Circuit Court of Appeals from adverse Commission decisions. 47 U.S.C. § 402(b). The applicable standard of review is contained in § 706 of the Administrative Procedure Act. 5 U.S.C. § 706(2)(A) ("arbitrary, capricious, an abuse of discretion"). For a discussion of the § 706 standard of review, see Citizens to Preserve Overton Park, Inc. v. Volpe, 401 U.S. 402, 416 (1971) ("Although this [court's] inquiry into the facts is to be searching and careful, the ultimate standard of review is a narrow one. The court is not empowered to substitute its judgment for that of the agency."); Ethyl Corp. v. EPA, 541 F.2d 1, 33-37 (D.C. Cir. 1976) (a court reviewing agency action must affirm if a rational basis to the agency decision can be discerned).

- 61. See M. Mueller, supra note 2, at 13-14; J. Robinson, supra note 27, at 44.
- 62. See M. Mueller, supra note 2, at 13-16; J. Robinson, supra note 27, at 42-52; see also NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION, ECONOMIC TECHNIQUES FOR SPECTRUM MANAGEMENT, ch. II, at 2-5 (1979) [hereinafter, MATHTEC STUDY].
 - 63. J. Robinson, supra note 27, at 47-50.
 - 64. Id. at 50-52.
 - 65. M. Mueller, supra note 2, at 14; J. Robinson, supra note 27, at 50-52.
- 66. On the complexity and difficulty of FCC decisionmaking in these proceedings, see Jones, Use and Regulation of the Radio Spectrum: Report on a Conference, 1968 WASH. U.L.Q. 71, 75-78; MATHTEC STUDY, supra note 62, ch. II, at 5-16; Metzger & Burrus, supra note 29; M. Mueller, supra note 2, at 13-16; J. Robinson, supra note 27, at 53-55; Note, supra note 33, at 472; see also Gross v. FCC, 480 F.2d 1288, 1292 n.7 (2d Cir. 1973) (Commission may prescribe the use of frequencies based on the purpose and nature of the transmission as well as technical considerations). FCC allocation proceedings may also change an existing allocation scheme or technical standards. Such a change, for example, could either permit additional licenses to be established, or permit "sharing" of spectrum between two or more communications services. Compare 9 kHz AM Allocations, 88 F.C.C.2d 290 (1981) (if approved, would have created many more AM stations by reducing AM channel spacing from

versial.⁶⁷ First, the public interest standard used by the Commission to make decisions is interpreted subjectively.⁶⁸ Thus, rulemaking participants often interpret application of this standard differently, giving rise to significant controversy in the proceedings.⁶⁹ Second, for some spectrum users the quantity of spectrum made available by the Commission will determine the size and profitability of their industry.⁷⁰ Finally, other spectrum users, particularly radio and television broadcasters, view spectrum allocation proceedings as potentially bringing the risks of new interference,⁷¹ added competition,⁷² or both to compromise their communications services.⁷³ In combination, these factors render spectrum allocation proceedings very complex and controversial.

Many commentators have criticized the current system of block allocations.⁷⁴ Among the identified problems with the current system are that it

10kHz to 9kHz) with UHF Spectrum Sharing, 23 F.C.C.2d 325 (1970) (providing for limited frequency sharing between UHF broadcasting and land mobile communication).

- 67. See generally Parkman, The FCC's Allocation of Television Licenses: Regulation with Inadequate Information, 46 Alb. L. Rev. 22 (1981); Rosenblum, Low Visibility Decision-Making by Administrative Agencies: The Problem of Radio Spectrum Allocations, 18 Admin. L. Rev. 19 (1965).
- 68. Johnson, Towers of Babel: The Chaos in Radio Spectrum Utilization and Allocation, 34 LAW & CONTEMP. PROBS. 505, 516-19 (1969); J. Robinson, supra note 27, at 42-44.
- 69. See M. Mueller, supra note 2, at 13-16; J. Robinson, supra note 27, at 44-47. An example of the kinds of decisions the FCC can be called upon to make is shown in Lehigh Cooperative Farmers, Inc., 10 F.C.C.2d 315 (1967). The FCC relegated the applicant to the less desirable business radio service, rather than the special industrial radio service, on the grounds that a livestock breeding business is of higher priority than the dairy inspection business. Id. at 316.
- 70. In the land mobile communications industry, for example, the more spectrum made available the more radio communications systems can be sold. See J. Robinson, supra note 27, at 53-54. Further, to a large extent the future sales of mobile radio equipment depend on obtaining increased spectrum. See id.; infra notes 129-38 and accompanying text.
- 71. See, e.g., UHF Notice, supra note 20, at 25,587, 25,590; Availability of FM Stations, 94 F.C.C.2d 152 (1983) (reduced station separation mileage requirements would create more stations and more interference), reconsideration granted in part, 97 F.C.C.2d 279 (1984); 9 kHz AM Allocations, 88 F.C.C.2d 290 (1981) (if approved, would have created more AM stations at the expense of increased interference). In effect, new interference reduces the useful service areas of broadcast stations thus diminishing the quality of service to existing viewers and listeners or perhaps precluding service altogether. See id. at 305-08.
- 72. See generally Planning of Broadcasting in the 1605-1705 kHz Band, 50 Fed. Reg. 33,844 (1985) (first report discussing U.S. proposals for additional AM broadcasting in the 1605-1705 kHz frequency band). Added competition may hurt existing broadcasters by establishing more radio stations to compete for available advertising dollars. See Fowler & Brenner, supra note 9, at 231-33.
- 73. Availability of FM Stations, 94 F.C.C.2d at 157, 164-70; 9kHz AM Allocations, 88 F.C.C.2d at 296-98, 305-08.
- 74. See Jones, supra note 66, at 81, 100-01 (block allocations produce uncertainty over the "true value" of spectrum; Commission has consistently failed to articulate criteria for spectrum allocation decisions); J. Robinson, supra note 27, at 42-52 (existing allocations process

(1) fails to allocate spectrum efficiently,⁷⁵ (2) remains inflexible in the face of changing technology,⁷⁶ (3) deters spectrum-efficient research and development,⁷⁷ (4) creates complex and difficult issues that, due to a lack of adequate resources, prevent the Commission from making effective decisions,⁷⁸ (5) relies on an excessively vague public interest decisionmaking standard,⁷⁹ and (6) precludes adequate long range planning.⁸⁰ As a result, commentators have proposed alternative spectrum management systems designed to remedy these infirmities.⁸¹ The flexible radio service proposal offered by the Commission is one such alternative. It would use market forces to bring flexibility to the Commission's rigid block allocations system. In some respects, inaugurating a flexible radio service is a step toward establishing an alternative "market forces" method of allocating spectrum. However, the extent to which the Commission may rely on market forces to attain public interest goals within the 1934 Act is not clear, and the applicable law remains unsettled.⁸²

C. Role of Market Forces

One of the key premises of the flexible radio service proposal is the Commission's desire to interject market forces into its decisions as to which particular communications services are entitled to use designated radio

fails to efficiently allocate spectrum); see also PRESIDENT'S TASK FORCE ON COMMUNICA-TIONS POLICY, FINAL REPORT, ch. 8, at 15-16 (1968) [hereinafter TASK FORCE FINAL RE-PORT]; Johnson, supra note 68, at 509-18; Robinson, supra note 55, at 169; Note, supra note 33, at 461-64; M. Mueller, supra note 2, at 13-16.

^{75.} See Johnson, supra note 68, at 509-15 (policymakers differ on the meaning of "spectrum efficiency"); J. Robinson, supra note 27, at 42-52; see also infra note 185 and accompanying text.

^{76.} Jones, supra note 66, at 81, 100-01.

^{77.} Id. at 82-83.

^{78.} Johnson, supra note 68, at 515-16; Robinson, supra note 55, at 216-24; Note, supra note 33, at 464; M. Mueller, supra note 2, at 13-15.

^{79.} See Geller, A Modest Proposal for Modest Reform of the Federal Communications Commission, 63 GEO. L.J. 705, 715-18 (1975) (political or other biases often permeate FCC decisions, leading to heavy role for Commissioner's preferences); Johnson, supra note 68, at 517. See generally Friendly, The Federal Administrative Agencies: The Need for Better Definition of Administrative Standards, 75 HARV. L. REV. 863, 1055, 1263 (1962); J. Robinson, supra note 27, at 42-44.

^{80.} Johnson, supra note 68, at 517; Note, supra note 33, at 463.

^{81.} See infra notes 159-73 and accompanying text. To date, however, none have been authorized by statute. The current Commission has accepted many of the commentators' criticisms and responded by advocating the use of "market forces" as a regulatory tool wherever feasible, believing that markets make better decisions than FCC Commissioners. Cf. Office of Communication of the United Church of Christ v. FCC, 707 F.2d 1413, 1443 (D.C. Cir. 1983); Fowler & Brenner, supra note 9, at 239-40.

^{82.} See infra notes 83-117 and accompanying text.

spectrum.⁸³ While recent Commission decisions evince a preference for the use of market forces in lieu of regulation,⁸⁴ there are limits on the degree to which the Commission may rely on market forces exclusively, in lieu of regulation, in making public interest determinations.⁸⁵ Several court decisions have addressed these issues.

In FCC v. Sanders Bros. Radio Station, ⁸⁶ a station owner objected to the entry of a new broadcast station in its city of license by alleging that local advertising revenues could not support an additional radio station. ⁸⁷ The Supreme Court refused to consider the station owner's argument and concluded that economic injury to an existing station is not a "separate and independent" factor for the Commission to consider when passing on the merits of a license applicant. ⁸⁸ The Court stated that it is not the Commission's function to grant monopolies ⁸⁹ or to protect incumbent licensees, ⁹⁰ but to protect the listening public. ⁹¹ The Court, however, did not forbid the Commission from considering competitive impacts; if the incumbent licensee's arguments proved true, both stations might not survive and the public would be deprived of radio service. ⁹² The Court determined that competitive economic injury to a radio station is not an element that, without more, should unduly influence the Commission's decision when passing on the merits of a broadcast license application. ⁹³

^{83.} See UHF Notice, supra note 20, at 25,595.

^{84.} Id.; see infra notes 105-17 and accompanying text.

^{85.} See United Church of Christ, 707 F.2d at 1443.

^{86. 309} U.S. 470, reh'g denied, 309 U.S. 642 (1940).

^{87.} Id. at 471.

^{88.} Id. at 476.

^{89.} *Id*.

^{90.} Id. at 475.

^{91.} Id.

^{92.} Id. at 476. Fowler & Brenner argue, supra note 9, at 234, that the market to be concerned with is the market for advertising dollars, and thus, if the Court were to remain true to its logic, the Commission should properly be concerned with the influence of billboards, newspapers and other media. Cf. West Mich. Telecasters, Inc. v. FCC, 460 F.2d 883 (D.C. Cir. 1972) (cessation of existing service is a matter affecting the public interest).

^{93.} FCC v. Sanders Bros. Radio Station, 309 U.S. 470, 473 (1940). See generally Carroll Broadcasting Co. v. FCC, 258 F.2d. 440 (D.C. Cir. 1958) (establishing the so-called "Carroll doctrine" by which existing licensees could challenge the grant of a new license in their community by bearing the "heavy burden" to prove that service to the public would be harmed in a way that is detrimental to the public interest). The criteria necessary to make a Carroll showing includes an estimate of the revenue potential of the market, and whether a new loss in public service programming for the market would occur. See WLVA, Inc. v. FCC, 459 F.2d 1286, 1297 (D.C. Cir. 1972). Recently, the Commission has initiated a proceeding to consider "abolishing certain policies that address the issue of economic injury to existing broadcast stations." Notice of Inquiry, 2 FCC Rcd 3134, 3134 (1987). In a review of over 80 cases, the Commission found no instance of a successful Carroll claim. Id. at 3135.

The Court again considered the proper role of competition in determining the public interest in FCC v. RCA Communications, 94 holding that competition alone does not necessarily further the public convenience, interest, or necessity. 95 The FCC had authorized the Mackay Radio and Telegraph Co. to construct radio telegraph facilities in Portugal and the Netherlands that would duplicate and compete with virtually identical existing facilities operated by RCA. 96 The Court disagreed with the Commission's finding that a national policy in favor of competition existed and would be furthered by authorization of duplicate facilities. 97 The Commission reasoned that such a national policy dictated establishing competition wherever "reasonably feasible." 98 The Court criticized the Commission's determination, holding it improper for public interest determinations to be based solely on competitive considerations. 99 Indeed, the Court cited the very existence of the 1934 Act as evidence that Congress did not intend for competition alone to guide Commission decisions. 100

RCA and Sanders Bros. permit the FCC to consider competition as a factor in public interest policy making, as long as competition or its absence is not the single overriding principle directing the FCC's activity. The Commission must articulate a reasonable expectation of some other beneficial effect, such as service improvement, in which to ground its decisions. A mere conclusory faith in the benefits of competition is not enough. In neither case, however, did the Court deal with the market forces deregulatory rationale that underlies the Commission's proposed flexible radio service. This rationale has more significant implications. Its essence is that a minimization of Commission oversight and reliance on market forces will itself achieve public interest goals.

^{94. 346} U.S. 86 (1953); see also Hawaiian Tel. Co. v. FCC, 498 F.2d 771, 777 (D.C. Cir. 1974) (FCC cannot "automatically equate the public interest with additional competition").

^{95. 346} U.S. at 96-97.

^{96.} Id. at 88-89.

^{97.} Id. at 89, 91.

^{98.} Id. at 89.

^{99.} Id. at 90-95.

^{100.} Id. at 93.

^{101.} See FCC v. RCA Communications, 346 U.S. 86, 93 (1953); FCC v. Sanders Bros. Radio Station, 309 U.S. 470, 473 (1940); Hawaiian Tel. Co. v. FCC, 498 F.2d 771, 777 (D.C. Cir. 1974).

^{102.} RCA, 346 U.S. at 97.

^{103.} Id.; see also Hawaiian Tel., 498 F.2d at 777.

^{104.} Although the meaning of the terms "competition" and "market forces" may at first blush appear the same, upon closer inspection they are different. "Competition" appears to characterize a regulatory tool used to achieve previously articulated public interest purposes. See Fowler & Brenner, supra note 9, at 230-36. "Market forces," on the other hand, refers to a means by which the public may directly influence communications policy by removing the

In 1976, the Commission invoked the market forces rationale to deregulate radio station program formats. The Commission concluded in a policy statement that the public interest is best served when market forces and competition among broadcasters guide format choices. The Commission decided to allow market forces, rather than predetermined regulatory guidelines, to control the amount and content of radio station program formats. The FCC v. WNCN Listener's Guild, Sistener groups wishing to preserve a particular radio format challenged the FCC's policy statement. The Supreme Court refused to overturn the FCC's policy statement, and accepted the FCC's conclusion that, even after a full evidentiary hearing, there would be no assurance that the FCC's decision would be any more suitable to disgruntled listeners than a decision by station management. The Court unanimously agreed that the decision of whether to use market principles rests within the FCC's competence to assess the radio broadcast market and likely licensee behavior.

Commission as an interpreter of the public interest. See id. at 210-11 ("the public's interest, then, defines the public interest"). The difference appears to be in who defines and articulates the public interest: the public itself, or the Commission. For better or worse, the 1934 Act appears to settle this question in favor of the Commission. Put differently, the Act requires the Commission to regulate "in the public interest." The issue presented by the Commission's market forces rationale is whether the Act permits the Commission to, in essence, define the public interest to be virtually no regulation at all. RCA and Sanders Brothers refer to the role of competition, not the use of market forces. See supra notes 101-03 and accompanying text. This distinction is important because, in a sense, the tug of war between the trusteeship model and marketplace models of regulation is a battle for the power to define the public interest.

- 105. See In re Development of Policy Re: Changes in the Entertainment Formats of Broadcast Stations [hereinafter Entertainment Formats], 60 F.C.C.2d 848 (1976) (mem.), reconsideration denied, 66 F.C.C.2d 78 (1977).
- 106. See In re Development of Policy Re: Changes in the Entertainment Formats of Broadcast Stations, 57 F.C.C.2d 580 (1976), ordered, 60 F.C.C.2d 848 (1976) (mem.), reconsideration denied, 66 F.C.C.2d 78 (1977); see also Entertainment Formats, supra note 105, at 863-65
 - 107. See Entertainment Formats, supra note 105, at 863-65.
- 108. 450 U.S. 582 (1981). There is a great deal of literature on the WNCN case. See, e.g., Note, The End of the Format Doctrine—Public Hearings on Changes in Entertainment Formats Need not be Held in Conjunction with Applications to Transfer or Renew Radio Broadcast Licenses: FCC v. WNCN Listener's Guild, 450 U.S. 582 (1981), 22 SANTA CLARA L. REV. 569 (1982).
 - 109. See WNCN, 450 U.S. at 585-86.
 - 110. Id. at 603.
 - 111. Id. at 595-96.
- 112. Id. at 608 (Marshall, J., dissenting). Justice Marshall, writing for the dissent, objected only that the FCC's policy statement lacked a safety valve procedure to instill some flexibility in an otherwise rigid general policy. Id. at 620 (Marshall, J., dissenting). The dissent believed that the need for a "safety valve" feature should be especially strong where the Commission's forecast that its policies promote the public interest is based solely on predictions and inherently lacks factual support. Id. at 611 (Marshall, J., dissenting).

The Commission has also applied the market forces principle in a variety of other deregulatory contexts. For example, the Commission chose to rely on market forces to supply adequate children's television programming, 113 and it reduced or eliminated many of the regulatory requirements governing broadcast station programming. 114 Although WNCN endorsed the use of market forces in FCC programming determinations, it remains questionable whether the market concept can be extended to basic frequency and spectrum use determinations. Even if spectrum is first allocated by the Commission, it is questionable whether WNCN's rationale permits licensees to choose the type of fundamental communications services provided. 115 Perhaps most significant, the 1934 Act does not specifically require the Commission to regulate and determine program formats while it does explicitly require the Commission to allocate frequencies and prescribe service. 116 To date, the Commission has not applied its market forces rationale to questions involving the primary allocation and use of radio spectrum. 117 It is the

^{113.} See Children's Television Programming and Advertising Practices, 96 F.C.C.2d 634, aff'd sub nom. Action for Children's Television v. FCC, 756 F.2d 899 (D.C. Cir. 1983).

^{114.} Specifically, the Commission (1) deleted quantitative guidelines encouraging radio licensees to present certain amounts of news or public affairs programming, (2) eliminated the so-called "ascertainment" process that required licensees to affirmatively discover the programming needs and interests of their community of license, (3) removed regulations limiting the amount of time the licensee could devote to commercials, and (4) deleted the requirement that radio stations keep "logs" of the programming that is broadcast. See Deregulation of Radio, 84 F.C.C.2d 968, reconsideration granted in part, 87 F.C.C.2d 797 (1981), aff'd in part, remanded in part sub nom. Office of Communication of the United Church of Christ v. FCC, 707 F.2d 1413 (D.C. Cir. 1983), on remand sub nom. Deregulation of Radio, 96 F.C.C.2d 930 (responding to court decision and establishing requirements to keep a minimum quarterly issues list and programming responsive to those issues), reconsideration denied, 57 Rad. Reg. 2d (P & F) 93 (1984), vacated and remanded sub nom. Office of Communication of the United Church of Christ v. FCC, 779 F.2d 702 (D.C. Cir. 1985); see also Deregulation of Television, 98 F.C.C.2d 1076 (1984); cf. Campbell, The FCC's Proposal to Deregulate Radio: Is It Permissible Under the Communications Act of 1934?, 32 FED. Com. L.J. 233 (1980).

^{115.} See Telecommunications Research & Action Center v. FCC, 800 F.2d 1181, 1185 (D.C. Cir. 1986) (in affirming FCC decision to eliminate "regulatory underbrush" policies, the court interpreted WNCN and United Church of Christ narrowly to mean that the Commission may rely upon marketplace forces where it finds that a "market approach offers the best means of controlling [broadcast] abuse.").

^{116.} See 47 U.S.C. § 307(a) (1982). The issue of program formats arises in the context of determining the "public interest" in license renewal proceedings. WNCN, 450 U.S. at 584. In WNCN, the Supreme Court treated the program format change as one issue among many the Commission must weigh in reviewing and granting licenses in the public interest. 450 U.S. at 600. The Court noted that broadcasters have no obligation to obtain prior government approval to change formats. Id.

^{117.} The Commission, however, has permitted broadcast licensees almost complete discretion in determining the nature of communication services that are supplied on channels that are subsidiary to the primary broadcast signals. See infra notes 239-47 and accompanying text.

Commission's proposal for a flexible radio service that, for the first time, raises this issue.

D. Development of the Flexible Radio Service Proposal

Two principal criticisms of the Commission's allocations process are that it neither satisfactorily responds to changing societal needs nor sufficiently accommodates the development of new technologies. The flexible radio service proposal is tailored to meet these drawbacks by granting significantly increased autonomy to licensees. The proposal would establish a block allocation specifically for a flexible radio service. For the first time, the Commission would establish a market in the use of radio frequency spectrum initially allocated for broadcasting.

The basic ideas and rationale of a flexible radio service were first articulated in a September, 1983 report prepared by the Commission's Office of Plans and Policy. Plans are controlled to criticisms that FCC centralized block allocations planning was slow to change and unable to accommodate changing technology, the Plans and Policy Report proposed that the Commission establish a decentralized flexible radio service with only minimum controls to define and prevent interference. The Report recommended experimentation with a flexible radio service in UHF television spectrum,

^{118.} See Fowler & Brenner, supra note 9, at 210-12. See generally FCC OFFICE OF PLANS AND POLICY, A FRAMEWORK FOR A DECENTRALIZED RADIO SERVICE, (1983) [hereinafter PLANS AND POLICY REPORT]; M. Mueller, supra note 2.

^{119.} See UHF Notice, supra note 20, at 25,595.

^{120.} Only the spectrum proposed by the Commission for a flexible service—UHF television channels 50-59—would be eligible to host flexible licensees. *Id.*

^{121.} Id. Recently, the Commission has applied the "flexible use" principal in two additional contexts. In Land Mobile Reserve Bands, 2 FCC Rcd 1825 (1986), the Commission, among other things, allocated 2 MHz of spectrum at 901-902 MHz and 940-941 MHz for a "general purpose mobile radio service." Id. While the Commission allocated these frequencies exclusively for mobile purposes, individual licensees are given the authority to make decisions as to service details and system design. Id. at 1838. The Commission rejected arguments that establishment of a general purpose mobile service is prohibited by the 1934 Act §§ 303(a)-(c), 307(b). Id. at 1839-40. In Flexible Allocations in the Domestic Public Land Mobile Service, 2 FCC Rcd 2795 (to be codified at 47 C.F.R. pt. 22) (proposed April 23, 1987), the Commission proposed several complex changes to the frequency allocations for mobile common-carriers to make the existing allocations "more flexible and thus more able to respond to changes in market demand." 2 FCC Rcd at 2795.

^{122.} PLANS AND POLICY REPORT, supra note 118.

^{123.} Id. at 1.

^{124.} Id. at 1-4. There is a limit, however, on the extent to which the Commission can function merely as a "traffic cop" of the airwaves. In the NBC case, the Court was explicit in interpreting the 1934 Act to require the Commission to be much more; the Commission has the added burden of determining "the composition of [the] traffic." NBC v. United States, 319 U.S. 190, 216 (1943).

thus foreshadowing the current proposal.¹²⁵ On May 31, 1985, the Commission adopted a Notice of Proposed Rulemaking containing a specific proposal for a flexible radio service in UHF television spectrum (UHF Notice).¹²⁶

The Commission initiated the flexible radio proposal; it was not prompted by a public petition. The proposal supplements the UHF Notice as part of a broader issue of allocating spectrum among UHF television stations and two-way land mobile communications. For over twenty years, the land mobile industry has requested a greater number of frequencies for provision of land mobile services. The principal rationale is that because suitable frequencies have not otherwise been available, land mobile has sought the reallocation of spectrum presently used by the UHF television service. The UHF Notice is a partial response by the Commission to the pressure of the land mobile industry to reallocate UHF spectrum for land mobile purposes.

To some extent, the land mobile industry has succeeded in its efforts to reallocate UHF spectrum. ¹³² In 1970, the Commission allocated spectrum

^{125.} See Plans and Policy Report, supra note 118, at 52. This report reviews earlier government studies on the problems of spectrum allocation, and articulates some of the benefits of introducing more flexibility into spectrum usage decisions. Id. at 5-12. The Commission is urged to begin a rulemaking proceeding to explore the issues raised by a flexible radio service. Id. at 53. See generally R. SMALL, supra note 19 (reviewing the pros and cons of the existing system of allocating spectrum and offering several alternative approaches).

^{126.} See UHF Notice, supra note 20, at 25,595-98.

^{127.} Id. at 25,595.

^{128.} Id. The Land Mobile Communications Service (Land Mobile), is regulated under 47 C.F.R. pts. 21, 90 (1986). Part 90 regulates Private Land Mobile Services, for example, taxis, delivery services, and repair services. Part 21 regulates Public Land Mobile Communications Services, for example, ambulance, police, fire and rescue. Both services are technically very similar in that both use mobile facilities "dispatched" from centrally located base stations. See generally J. Robinson, supra note 27, at app. B.

^{129.} For a discussion of these needs, and the FCC Private Radio Bureau Staff's view of the insufficiency of existing spectrum for Land Mobile purposes, see FCC, REPORT ON PUBLIC SAFETY COMMUNICATIONS REQUIREMENTS (1985); FCC, REPORT ON FUTURE PRIVATE LAND MOBILE TELECOMMUNICATIONS REQUIREMENTS (1983) [hereinafter PRIVATE LAND MOBILE REQUIREMENTS]. There are also strong economic pressures militating for additional spectra: the more spectra made available, the greater the number of new communications systems that can be sold.

^{130.} See, e.g., Courtney, The Double Standard, 20 FED. COMM. B.J. 152 (1966) (arguing that UHF-TV has been allocated excessive spectrum and Land Mobile has been allocated too little). Another reason why Land Mobile looks to UHF-TV spectrum to fill its needs is that UHF spectrum appears to be the most readily available spectrum that is compatible with existing Land Mobile services. See Private Land Mobile Requirements, supra note 129, at ch. 7, 13-14.

^{131.} UHF Notice, supra note 20, at 25,587.

^{132.} See infra notes 133-38 and accompanying text. In 1982 the land mobile industry was successful in urging Congress to enact legislation that would give public land mobile services a "priority" in future land mobile spectrum allocation decisions. See Communications Amend-

in UHF channels 14 through 20 for limited "sharing" with land mobile users. ¹³³ In 1975, the Commission again attempted to meet the needs of the land mobile industry by reallocating all of the upper fourteen UHF-TV channels (70-83) for a variety of new land mobile technologies including cellular telephone. ¹³⁴ But these allocation decisions have failed to satisfy land mobile's continual demands for spectrum. ¹³⁵ In 1985, responding to increased pressure from the land mobile industry, ¹³⁶ the Commission issued the UHF Notice recommending further sharing of certain UHF channels in the eight largest U.S. television markets. ¹³⁷ The UHF Notice includes the Commission's flexible radio service proposal as a potential means of avoiding future spectrum controversies between the television and land mobile industries. ¹³⁸

The flexible radio service proposal would provide for the unforeseen future needs of the land mobile industry not by directly allocating new spectrum or by reallocating television spectrum, but instead by providing a mechanism whereby land mobile needs could be met by a successful "marketplace" bid. ¹³⁹ In effect, the land mobile operator could purchase television stations in order to change the spectrum use from television service to land mobile. The flexible radio proposal would establish a market in spectrum, allowing TV and land mobile to compete among themselves for the right to use spectrum, rather than compete for the FCC's decisionmaking

ments Act of 1982, Pub. L. No. 97-259, § 120(a), 96 Stat. 1096 (codified at 47 U.S.C. § 332(a)) (establishing a public safety priority for spectrum the Commission designates for land mobile); see also J. Robinson, supra note 27, at app. B.

^{133.} See Land Mobile Spectrum Allocations, 23 F.C.C.2d 325 (1970) (authorizing a geographic sharing tantamount to a reallocation of two of the lower seven UHF channels from broadcasting to land mobile in the nation's top 20 markets). Later the FCC added three other markets. The Commission initially allocated UHF to television channels 14-83 in its Sixth Report and Order, 1 Rad. Reg. (P & F) 91:601, 91:697 (1952). For a useful discussion of the development of television's allocation plan, see Johnson, Television Service and the FCC, 46 Tex. L. Rev. 1100, 1113-24 (1968).

^{134.} See Future Use of the Frequency Band 806-960 MHz, 51 F.C.C.2d 945 (1975), aff'd sub nom. National Ass'n of Regulatory Util. Comm'rs v. FCC, 525 F.2d 630 (D.C. Cir.) (NARUC I), cert. denied, 425 U.S. 992 (1976).

^{135.} See, e.g., Private Land Mobile Radio Services (Channel 16 Public Safety Allocation), 59 Rad. Reg. 2d (P & F) 910 (1986) (reallocating portions of channel 16 in Los Angeles for public safety land mobile communications).

^{136.} See UHF Notice, supra note 20, at 25,587.

^{137.} A total of 28 six MHz channels were proposed to be made available for use by land mobile. In general, the UHF Notice locates spectrum for land mobile by proposing to reduce the interference protections presently afforded the UHF stations proximate to the locations of prospective land mobile operations. See id. at 25,587-90.

^{138.} See id. at 25,595.

^{139.} *Id*.

favor within time-consuming allocations rulemaking proceedings. ¹⁴⁰ Specifically, the Commission proposal for a flexible radio service would permit market forces to decide the use of spectrum in what is now UHF television channels 50-59. ¹⁴¹

A flexible system permits changes in service, from one type of communications service to another, without prior government approval¹⁴² in response to perceived changes in the marketplace. With minimal governmental oversight, licensees in the flexible radio service could provide whatever form of service is most economically desirable. The licensee, not the Commission, would determine the type of service provided, for example, broadcast, common-carrier, or general. The Commission would be relieved of the task of defining and characterizing the nature of a service proposal in order to apply the pertinent regulatory scheme. Additionally

^{140.} See id. at 25,595; see also supra notes 61-73 and accompanying text.

^{141.} UHF Notice, supra note 20, at 25,595.

^{142.} See infra notes 151-53 and accompanying text.

^{143.} Id.

^{144.} Id.

^{145.} Section 3(o) of the 1934 Act defines "broadcasting" as "the dissemination of radio communications intended to be received by the public, directly or by the intermediary of relay stations." 47 U.S.C. § 153(o) (1982); see also 47 C.F.R. § 2.1(c) (1986). For judicial interpretation of § 3(o), see Functional Music, Inc. v. FCC, 274 F.2d 543, 548 (D.C. Cir. 1958) (test for whether a particular activity constitutes broadcasting is whether there exists an intent for public distribution of programming that is of interest to the general audience), cert. denied, 361 U.S. 813 (1959). The Functional Music "intent" test was later affirmed in National Ass'n of Broadcasters v. FCC, 740 F.2d 1190, 1201 (D.C. Cir. 1982); see also Telecommunications Research & Action Center v. FCC, 801 F.2d 501, 515 (D.C. Cir. 1986) (finding teletext transmission technology to meet the statutory definition of broadcasting), cert. denied, 107 S. Ct. 3196 (1987); KMLA Broadcasting Corp. v. Twentieth Century Cigarette Vendors Corp., 264 F. Supp. 35, 42 (C.D. Cal. 1967) (FM subsidiary communications available only to paying subscribers is not broadcasting).

^{146.} The United States Court of Appeals for the District of Columbia Circuit has presented a two-pronged test to determine whether a communications service should be considered common carriage. The test is whether there is (1) a legal compulsion to serve the public, and (2) an indiscriminate holding of oneself out "to the clientele one is suited to serve." *NARUC I*, 525 F.2d 630, 641 (D.C. Cir.), cert. denied, 425 U.S. 992 (1976). For a comparison of the broadcast regulatory scheme versus the common-carrier regulatory scheme, and the pertinent legislative history of the 1934 Act, see CBS v. Democratic Nat'l Comm., 412 U.S. 94, 103-14 (1973).

^{147.} See UHF Notice, supra note 20, at 25,595. The Commission's UHF Notice does not elaborate on the nature of a "general" service. It appears to be a flexible licensee engaging in a communication service not otherwise classified as one of the traditional communications services. Id. at 25,595 n.47. Importantly, however, the type of service chosen by the flexible licensee carries consequences as to the regime of rules that must be complied with. See infra note 150 and accompanying text.

^{148.} In 1982, the Commission established a Direct Broadcast Satellite Service (DBS) wherein applicants could choose the service classification and regulatory regime desired. See Direct Broadcast Satellites, 90 F.C.C.2d 676, 680-82 (1982), aff'd in part, vacated in part sub

the Commission would no longer need to decide spectrum allocations questions by making comparative evaluations of fundamentally different communications services, like UHF-TV and land mobile, that presently compete within rulemaking proceedings for use of a particular segment of spectrum. Whatever the type of communications service the licensee selects, the Commission expects compliance with the rules applicable to the chosen service. The licensee would notify the Commission thirty days prior to changing service, and authority to change service would be automatic unless the Commission notifies the licensee to the contrary. In this manner, the Commission states that market forces would influence the decision of the

nom. National Ass'n of Broadcasters v. FCC, 740 F.2d 1190 (D.C. Cir. 1984). Thus, a DBS licensee, and not the Commission, would choose between the different regulatory regimes of broadcasting and common carriage. 90 F.C.C.2d at 706-11; see also Plans and Policy Report, supra note 118, at 41-42; Comment, Deregulatory Options for a Direct Broadcast Satellite System, 33 Fed. Comm. L.J. 185 (1981); Comment, Direct Broadcast Satellites: Ownership and Access to the New Technology, 33 Fed. Comm. L.J. 245 (1981). The DBS service differs from the flexible radio service in that the Commission considered DBS as an emerging technology, justifying a "wait and see" regulatory approach. Viewing DBS authorizations as experimental in nature, the Commission wanted DBS participants to feel free to experiment with innovative service offerings and organizational regimes. 90 F.C.C.2d at 707-09. The Commission implied that a permanent regulatory regime may one day be adopted. Id. at 708-09. Applicants for DBS authorizations are expected to specify the applicable statutory regime as part of the application process depending on the desired type of service selected. Id.

In National Ass'n of Broadcasters v. FCC, 740 F.2d 1190 (D.C. Cir. 1984), the court affirmed most of the Commission's decision, but vacated the portion that exempted the customer-programmers of DBS common-carrier licensees from title III broadcast regulation. Id. at 1200-06. While the Commission has a great deal of discretion when dealing with experimental new technologies, that discretion does not include "authority to experiment with its statutory obligations." Id. at 1201: see also NARUC I. 525 F.2d at 644 (the regulatory status of a particular communication must be determined from the nature of the communication, not from the regulatory or deregulatory goals of the Commission). In Subscription Video, 2 FCC Rcd 1001 (1986), the Commission realized that NAB may have significant implications: many communications services that supply programming to common-carriers might now be required to be treated as broadcasters. Id. The Commission found that subscription video technology is not "broadcasting" within the 1934 Act where the video service does not intend to maximize its viewing audience. The Commission identified several indicia of intent: (1) whether the communications signal is scrambled or encrypted, (2) whether the communications service purveyor requires payment for viewing, and (3) any other factors probative of an intent to limit access to the signal. See id. at 1004-06. For helpful background on the problems presented by regulation of subscription video, see Hammond, To Be or Not To Be: FCC Regulation of Video Subscription Technologies, 35 CATH. U.L. REV. 737 (1986).

- 149. See UHF Notice, supra note 20, at 25,595.
- 150. For example, if a flexible licensee chose to be a broadcaster, compliance with 47 C.F.R. pts. 73 and 74 governing the broadcast service would be expected. See UHF Notice, supra note 20, at 25,595, 25,597; Direct Broadcast Satellites, 90 F.C.C.2d at 680-82; see also PLANS AND POLICY REPORT, supra note 118, at 41-42.
 - 151. See UHF Notice, supra note 20, at 25,595, 25,597.
 - 152. Id. at 25,595.

licensee as to which service to provide at a particular time. 153

II. ANALYSIS OF THE FLEXIBLE RADIO SERVICE AND ALTERNATIVE MARKET SYSTEMS OF ALLOCATING SPECTRUM

The introduction of market forces into decisions to allocate and use spectrum is not a new idea.¹⁵⁴ Several earlier studies,¹⁵⁵ and the flexible radio service proposal¹⁵⁶ each suggest ways to remedy perceived defects in the block allocations system.¹⁵⁷ Most of these perceived problems arise when spectrum is considered a scarce public resource in high demand.¹⁵⁸

A. Prior Proposals to Use Market Forces

There is no shortage of advocates for allocation systems wherein spectrum is allocated by market forces rather than by rulemaking proceedings that create discrete block allocations.¹⁵⁹ In A Property System for Market Alloca-

^{153.} Id. at 25,597.

^{154.} Whether a "market" in radio frequency spectrum should be established to remedy perceived defects in the current block system has been well discussed in the literature. See, e.g., De Vany, A Property System for Market Allocation of the Electromagnetic Spectrum: A Legal-Economic-Engineering Study, 21 STAN. L. REV. 1499 (1969); Minasian, Property Rights in Radiation: An Alternative Approach to Radio Frequency Allocation, 18 J.L. & ECON, 221 (1975). The most often cited source for the first articulation of these ideas is Coase, supra note 33, at 17-35. Even earlier discussions are collected id. at 31 n.56. See Coase, The Economics of Broadcasting and Government Policy, 56 Am. ECON. REV. PAPERS & PROC. 440 (1966); Coase, Evaluation of Public Policy Relating to Radio and Television Broadcasting: Social and Economic Issues, 41 LAND ECON. 161 (1965); Jones, supra note 66, at 81-97; Meckling, Management of the Frequency Spectrum, 1968 WASH. U.L.Q. 26, 31-34; Comment, The Public Interest and the Market in Color Television Regulation, 18 U. CHI. L. REV. 802, 811-16 (1951) (exploring a potential marketplace in color television technical standards); Note, supra note 33, at 472; cf. Note, The FCC and AM Stereo: A Deregulatory Breach of Duty, 133 U. PA. L. REV. 265 (1984) (arguing that a Commission decision to establish a market in AM stereo technical standards violates the 1934 Act).

^{155.} See supra note 154 and accompanying text.

^{156.} See supra notes 122-26 and accompanying text.

^{157.} See supra notes 74-80 and accompanying text; see also TASK FORCE FINAL REPORT, supra note 74, at 15-16.

^{158.} TASK FORCE FINAL REPORT, supra note 74, at 15-16. If instead use of the spectrum is considered bountiful, it is therefore available when desired and there should be little concern that spectrum is being allocated improperly or inefficiently. Notions of "scarcity" are increasingly being questioned. See Fowler & Brenner, supra note 9, at 221-26; Spitzer, Controlling the Content of Print and Broadcast, 58 S. CAL. L. REV. 1349, 1358-64 (1985) (examining various scarcity rationales and finding that all of them fail to adequately justify regulation of broadcast media when compared to print media); see also supra note 52 and accompanying text. Indeed, the linchpin of the predicted benefits of market forces is the belief that free markets are the best means to allocate scarce commodities to their "best and highest use." Fowler & Brenner, supra note 9, at 211.

^{159.} The most detailed system is proposed in De Vany, *supra* note 154. *See* Johnson, *supra* note 68, at 518-27 (discussing the advantages and disadvantages of a market in spectrum allo-

tion of the Electromagnetic Spectrum (A Property System), ¹⁶⁰ several legal, economic, and technical professionals collaborated and proposed a spectrum market experiment to test the theoretical costs and benefits of a fully specified market system of spectrum allocation including establishment of property rights. ¹⁶¹ This experiment would define property rights in spectrum using the three characteristics of time, ¹⁶² area, ¹⁶³ and spectrum. ¹⁶⁴ These characteristics form a "TAS package" and are specified for frequencies between 50 and 1000 MHz. ¹⁶⁵ By contrast, the flexible radio proposal deals with a pure market in only one of these dimensions, time. ¹⁶⁶ This proposal does not provide for changing service areas outside of the area characteristics initially made available. ¹⁶⁷ With respect to spectrum characteristics, flexible licensees could reduce operating bandwidths within the initially allocated spectrum but would be prohibited from exceeding the originally allocated bandwidth of six MHz. ¹⁶⁸ Thus, the "spectrum market" would be limited to a six MHz maximum size. ¹⁶⁹

A Property System also proposed a statutory framework for sale of TAS packages to the public.¹⁷⁰ Owners of these packages would be free to buy and sell TAS areas, raise and lower signal strengths, transfer TAS rights on a time basis, or transfer any or all of their spectrum.¹⁷¹ There would be no

cation and generally endorsing the seminal Coase economic approach); Minasian, supra note 154, at 227-35 (presenting a pure market approach using property rights in spectrum); Note, supra note 33, at 476-79 (proposing a limited marketplace pricing mechanism, designed to attain efficient frequency allocation but continuing government oversight in areas such as implementing new technology, and "prevent[ing] too great a concentration of control [over] broadcasting facilities").

- 160. De Vany, supra note 154.
- 161. Id. at 1499, 1499-501, 1512-29. A detailed statute is proposed that would enable Congress to "sanction" this experiment, thus acknowledging the desirability of congressional clarification of the 1934 Act. Id. at 1529-34.
- 162. The time component is defined as the duration of the radio transmission. *Id.* at 1512-13.
- 163. The area component is defined as rectangular or polygonal boundaries within which field strengths of a specified amount would be permitted. *Id.* at 1513-15. Transaction costs would be saved by using existing conveyancing procedures and avoiding undefined "no-man's" lands. *Id.*
- 164. The spectrum component is defined as the "bandwidth" of emissions, i.e., the frequency range over which the time and area rights attach. *Id.* at 1515-17.
 - 165. Id. at 1501-02.
 - 166. See UHF Notice, supra note 20, at 25,595.
 - 167. Id.
- 168. Six MHz is the bandwidth of one television channel. See 47 C.F.R. § 73.601 (1986); see also infra note 289 and accompanying text.
 - 169. See infra note 289 and accompanying text.
 - 170. De Vany, supra note 154, at 1529-34.
 - 171. Id. at 1529-30.

restrictions on transmitter power, antenna location, or height.¹⁷² In a flexible radio service, licensees would have the freedom to allocate bandwidth, time, and raise or lower signal strengths as long as these changes remained within the Commission's original allocation.¹⁷³

In order to record TAS agreements covering changes in any TAS component or any other transaction a potential purchaser would wish to know, A Property System proposed establishing a federal "central registry." Under the flexible radio service proposal, however, the FCC would continue to be the repository of this information. Nevertheless, the Commission left unspecified the extent to which flexible licensees, who decide to "sublet" their spectrum, must inform the Commission of the kind of service provided and the entities providing the service. The various requirements for government licensing of stations in the public interest under the Communications Act of 1934¹⁷⁷ would seem to be circumvented if the flexible licensee, and not the Commission, is deciding who and what operates on the frequencies of the licensee's flexible allocation. In effect, the Commission is delegating to private parties the spectrum use decisions Congress delegated to the FCC.

To establish a market system, A Property System advocates the use of auctions, or, alternatively, long term leases of spectrum.¹⁷⁹ State law would resolve the inevitable disputes over TAS rights.¹⁸⁰ In contrast, under its existing flexible radio service proposal, it is not clear how the Commission would convert existing television licensees into flexible licensees,¹⁸¹ nor is it clear how the Commission would enforce applicable rules¹⁸² if it were removed from its current role of spectrum "supervisor."¹⁸³

^{172.} Id. at 1530.

^{173.} See UHF Notice, supra note 20, at 25,587, 25,595-96; see also infra notes 202-07 and accompanying text.

^{174.} De Vany, supra note 154, at 1530.

^{175.} See UHF Notice, supra note 20, at 25,595.

^{176.} Id.

^{177.} See supra notes 1-7 and accompanying text.

^{178.} See infra notes 220-30 and accompanying text; see also supra note 148 and accompanying text; cf. National Ass'n of Broadcasters v. FCC, 740 F.2d 1190 (D.C. Cir. 1984) (requiring the customer-programmers of DBS licensees to comply with title III broadcast regulation if broadcasting is the service being engaged in).

^{179.} De Vany, supra note 154, at 1531-32.

^{180.} Id. at 1533-34.

^{181.} One problem with "grandfathering," for example, is that it theoretically produces a change in value of existing stations equal to the difference between the value of the right to operate as a flexible licensee and the right to operate as a television station. See Fowler & Brenner, supra note 9, at 243.

^{182.} UHF Notice, supra note 20, at 25,595-97; infra note 287 and accompanying text.

^{183.} See UHF Notice, supra note 20, at 25,595-97. The flexible licensee must still comply

A market system of spectrum allocation, such as the proposal in *A Property System*, is termed a "pure" market allocation system, and has several advantages. ¹⁸⁴ These include providing incentives to use spectra economically and efficiently, ¹⁸⁵ providing means for comparing the value of different uses of spectrum, ¹⁸⁶ engendering less federal oversight, ¹⁸⁷ eliminating time-consuming allocation proceedings, ¹⁸⁸ creating a source of federal revenue, ¹⁸⁹ and furthering the first amendment freedoms of broadcasters. ¹⁹⁰

The purported disadvantages are several. First, the business expectations of existing communications services that become or may become market participants might be disrupted, absent some method of preserving the legal status quo for existing licensees.¹⁹¹ Second, a market system would result in technically inefficient use of spectrum by permitting technically incompatible services to use the same block allocation of spectrum¹⁹² or by creating new

with the rules for the particular communications service being offered. But Commission review would be minimal or even non-existent. As a practical matter, enforcing Commission rules may be inconsistent with the desire to grant increased flexibility. See id.

- 184. See generally Plans and Policy Report, supra note 118, at 4-12.
- 185. See Coase, supra note 33, at 30; Johnson, supra note 68, at 520; Jones, supra note 66, at 83; Note, supra note 33, at 473. There are at least three meanings carried by the term "spectrum efficiency." It can mean allowing for differences in local spectrum demand to become a factor in determining the use of spectrum. UHF Notice, supra note 20, at 25,595. But spectrum efficiency can also mean insuring that available spectrum is used by the entity that places the highest value on the spectrum's use. See Plans and Policy Report, supra note 118, at 3; Fowler & Brenner, supra note 9, at 211. Finally, spectrum efficiency can mean the use of new technology to multiply the capability of spectrum to support new users. Fowler & Brenner, supra note 9, at 212 n.23; Robinson, supra note 39, at 1253-55.
 - 186. Note, supra note 33, at 473.
 - 187. Id.
 - 188. Johnson, supra note 68, at 520.
- 189. Revenue would be raised by auctioning the frequencies according to the pure market system. See Coase, supra note 33, at 24; Johnson, supra note 68, at 520; Note, supra note 33, at 474. Recently, the Commission has sought enabling legislation to authorize auctions of nonmass media spectrum. This proposal, however, has encountered significant political opposition. See S. REP. No. 301, 99th Cong., 2d Sess. 34 (1986); Spectrum Auction Kicking Around on Capitol Hill, BROADCASTING, May 18, 1987, at 77-78; see also E. Kwerel & A. Felker, Using Auctions to Select FCC Licensees (Federal Communications Commission Office of Plans and Policy Working Paper No. 16, 1985). Compare Botein, Comparative Broadcast Licensing Procedures and the Rule of Law: A Fuller Investigation, 6 GA. L. REV. 743, 759-61 (1972) (auctions would "abandon any attempt at reaching a reasoned decision") with Geller, The Appropriate Use of Lottery in Federal Licensing, 35 ADMIN. L. REV. 67 (1983) (generally endorsing the use of spectrum auctions to simplify administration of license applications).
- 190. Coase, supra note 33, at 37-40; Fowler & Brenner, supra note 9, at 217-18; Johnson, supra note 68, at 520.
- 191. Absent grandfathering, a TV station would merely be one of several competing applicants for a flexible license. See Robinson, supra note 39, at 1251.
- 192. See Jones, supra note 66, at 87-88; Robinson, supra note 39, at 1253-55. Land mobile communications services are fundamentally different from TV broadcast stations and, therefore, raise technical concerns that must be accommodated if both services are to remain inter-

forms of interference.¹⁹³ A market system has also been criticized because it would fail to account for noneconomic factors or "public policy" concerns.¹⁹⁴ Moreover, equipment manufacturing efficiencies would be lost if different communications services were found in the same spectrum on a locally varying basis.¹⁹⁵ For example, there could be a disincentive to manufacture TV receivers for national markets when a manufacturer is no longer certain that TV stations will be found on the receiver's channels.¹⁹⁶ There might also be an incentive to compromise technical standards to the detriment of the public's viewing.¹⁹⁷ Other objections voiced by critics are fears of increased monopolization,¹⁹⁸ concentration of spectrum use in "wealthy corporations,"¹⁹⁹ stockpiling,²⁰⁰ and outright political opposition.²⁰¹

B. Spectrum Markets and Flexible Use

The flexible radio service can be described as a "quasi-market" allocation system in radio spectrum: it shares some of the attributes of a pure market system and some of the attributes of a block allocation system. It is not a pure market approach, since the FCC would continue to license users. Also, unlike a pure market approach, there is no provision in the proposal for

ference-free. Id. But see PLANS AND POLICY REPORT, supra note 118, at 30-31 (suggesting several ways to prevent interference between mobile and fixed stations).

- 193. For example, so-called "intermodulation" interference is very difficult to foresee. This form of interference occurs when two or more undesired signals combine within a receiver in such a way as to produce a third signal inside of the receiver that appears as interference. See Jones, supra note 66, at 86-87; Robinson, supra note 39, at 1254; see also De Vany, supra note 154, at 1520-22 (suggesting three ways to assign liability for intermodulation interference: (1) the last party transmitting is liable for intermodulation interference caused to others; (2) existing users have absolute protection against intermodulation interference, and, therefore, must carry the newcomers' economic burden; and (3) existing users are denied any protection, and would have to pay costs to protect themselves from the newcomer's interference).
- 194. See Plans and Policy Report, supra note 118, at 5; Johnson, supra note 68, at 522-23 ("For the market activities to represent consumer desires, all those affected by a spectrum use would have to be able to 'bid' in the market."); Note, supra note 33, at 475; see also Jones, supra note 66, at 90-91 (in bidding for spectrum to support public safety communications, government bids might not reflect the true value to public of increased police communications capacity).
- 195. See Jones, supra note 66, at 87-88. The so-called "block" system also permits the establishment of "reserve" spectrum to provide for future growth. See Plans and Policy Report, supra note 118, at 5.
- 196. See Robinson, supra note 39, at 1255. The Commission staff notes that block allocation systems "may provide some increase in design certainty to equipment manufacturers." PLANS AND POLICY REPORT, supra note 118, at 5.
 - 197. See Robinson, supra note 39, at 1255.
 - 198. See Jones, supra note 66, at 91-92.
 - 199. See Note, supra note 33, at 474.
 - 200. See Jones, supra note 66, at 93.
 - 201. Id. at 97; see also Johnson, supra note 68, at 525; Meckling, supra note 154, at 26.

licensees to acquire spectrum greater than six MHz.²⁰² Nor does a flexible radio service include any provision to extend "flexible" coverage areas beyond the initially established interference-free contours.²⁰³ Yet a pure spectrum market would exist within the six MHz allocation in the designated geographic area.²⁰⁴ A flexible licensee providing television service would have the option of "developing" the spectrum for smaller bandwidth communications services, like land mobile communications.²⁰⁵ Theoretically, one six MHz channel could support hundreds of land mobile users.²⁰⁶ The "market" would influence the decision as to which service to provide.²⁰⁷

Another important difference between pure market proposals and the Commission's proposed flexible radio service is that the authors of *A Property System* believe that a change in the 1934 Act is necessary. The Commission, however, believes that no change in the Act is needed to implement its flexible radio service proposal. While the Commission's flexible proposal is narrower than a pure market approach, it nonetheless raises legal issues as to whether the trusteeship model of the 1934 Act would be transgressed.

III. A CHANGE IN THE 1934 ACT IS NECESSARY TO AVOID LEGAL UNCERTAINTY

For the Commission to establish a flexible radio service, it must make a determination that the institution of a flexible service is in the public interest.²¹¹ The Commission should also find, at least implicitly, that a flexible service is not otherwise precluded by the 1934 Act.²¹² The difficult problem faced by the Commission is whether the statutory public interest standard is

^{202.} See UHF Notice, supra note 20, at 25,597.

^{203.} Id.

^{204.} See supra notes 166-69 and accompanying text.

^{205.} See UHF Notice, supra note 20, at 25,595-97.

^{206.} See infra note 289 and accompanying text; see also Courtney, supra note 130, at 156-59 (arguing that each occupied TV channel actually precludes many more TV channels worth of land mobile communications due to the complex set of technical standards protecting TV reception from interference).

^{207.} See UHF Notice, supra note 20, at 25,595.

^{208.} See De Vany, supra note 154, at 1529-34.

^{209.} See UHF Notice, supra note 20, at 25,597-98.

^{210.} See infra notes 211-61 and accompanying text.

^{211.} See 47 U.S.C. § 303 (1982); see also infra notes 224-30 and accompanying text. The Commission's UHF Notice states that "allowing licensees more flexibility in choosing services will serve the public interest." UHF Notice, supra note 20, at 25,595.

^{212.} See UHF Notice, supra note 20, at 25,597-98; see also Texasgulf, Inc. v. Canada Dev. Corp., 366 F. Supp. 374 (S.D. Tex. 1976) (FCC's public interest finding on ownership issue cannot override explicit statutory prohibition).

broad enough to permit the establishment of a flexible radio service.²¹³ In the Commission's view, the few legal questions raised by a broad public interest finding either do not raise substantive issues or are easily resolved.²¹⁴ These issues do, however, raise serious concerns and should not be summarily decided without critical analysis. Among the specific issues presented by the Commission's proposal are: (1) whether the proposed flexible radio service transgresses existing statutory provisions that prohibit ownership of spectrum and provide for licensing of spectrum users;²¹⁵ (2) whether the Commission may exclude social or other public interest factors in making its public interest determinations;²¹⁶ (3) whether a flexible radio service would produce a market "bias" toward smaller bandwidth communications services;²¹⁷ and (4) whether administrative difficulties that arise evidence an impractical view of today's market in communications services.²¹⁸

If the Commission adopts rules implementing the flexible radio service, flexible licensees would experience significant legal and practical uncertainty that invites confusion and probable litigation.²¹⁹ This would be an unfortunate fate for an otherwise worthwhile solution to the Commission's general block allocation problems and the specific dispute between UHF broadcasters and land mobile communications services over the allocation of UHF spectrum. Many of the ideas and rationales supporting a flexible radio service clearly have merit and should be applied where Congress unequivocally approves. If successful legal challenges to the flexible radio service are to be avoided, the Commission should seek and obtain explicit statutory authority to institute a flexible radio service.

A. Possible Explicit Preclusion by Statutory Construction

There are several possible grounds on which a flexible radio service appears to be prohibited by the 1934 Act.²²⁰ The Commission could exceed the bounds of the public interest standard by interpreting the 1934 Act too broadly.²²¹ It could also grant or create rights held by flexible licensees that are interpreted as prohibited property interests²²² or deny statutory hearing

^{213.} See infra notes 271-82 and accompanying text.

^{214.} See UHF Notice, supra note 20, at 25,597-98.

^{215.} See infra notes 234-47 and accompanying text.

^{216.} See infra notes 275-82 and accompanying text.

^{217.} See infra notes 289-91 and accompanying text.

^{218.} See infra note 288 and accompanying text.

^{219.} See infra notes 220-91 and accompanying text.

^{220.} See infra notes 224-91 and accompanying text.

^{221.} See infra notes 224-30 and accompanying text.

^{222.} See infra notes 234-47 and accompanying text.

rights held by competing applicants for a frequency used for broadcasting.²²³

1. Broad Interpretation of the 1934 Act

The Commission has a responsibility to make basic spectrum allocation decisions itself,²²⁴ in accordance with the public interest,²²⁵ after affording parties an opportunity for notice and comment.²²⁶ Section 303(b) of the 1934 Act states that the Commission shall, as the public convenience, interest and necessity requires, "[p]rescribe the nature of the service to be rendered by each class of licensed stations and each station within any class."227 There are at least two logical interpretations of the Commission's proposed flexible radio service in light of section 303(b). Construed broadly, the statute permits the classification of a licensed flexible communications service with a regulating regime selected by the flexible licensee.²²⁸ Construed narrowly, the statute requires the Commission, not the licensee, to determine the specific nature of the communications service and regulatory regime provided in designated spectrum.²²⁹ The difference between the two readings is the extent to which the Commission can define a communications service with flexible attributes, or whether it must, with more specificity, determine the nature of the service of individual station classes. In the context of a flexible radio service, a broad reading of the statute is troublesome. The Commission would seem to be delegating to a private party not only the authority to decide to reallocate spectrum for changeable purposes, but also the kind of spectrum uses and technical decisions Congress delegated to the Commission.²³⁰

2. Ownership and the Flexible Radio Service

A licensee in a flexible radio service would come closer to owning its spectrum than any existing Commission licensee.²³¹ Such a licensee would possess unprecedented control over the use of spectrum initially allocated by the

^{223.} See infra notes 248-61 and accompanying text.

^{224. 47} U.S.C. § 303.

^{225.} Id.

^{226.} See supra note 60 and accompanying text.

^{227. 47} U.S.C. § 303(b).

^{228.} See UHF Notice, supra note 20, at 25,595. A broad reading would also permit a flexible licensee to select power outputs, and whatever technical standards the licensee deems appropriate to avoid interference to other spectrum users. In effect, the Commission would then be "licensing" any use of spectrum by any interested party, so long as an existing user is not adversely affected. Cf. supra notes 144-53 and accompanying text.

^{229.} Cf. supra notes 144-53 and accompanying text.

^{230.} See UHF Notice, supra note 20, at 25,595; see also supra notes 144-53 and accompanying text.

^{231.} See infra notes 234-47 and accompanying text.

Commission,²³² with almost complete security that its license would never be reclaimed by the government.²³³

a. Nature of Statutory Ownership

A flexible radio service licensee resembles a licensee in a service that would "own" its channels of radio communications.²³⁴ But the 1934 Act expressly forbids the Commission from establishing property rights in spectrum.²³⁵ The 1934 Act requires the Commission to license radio spectrum users for limited periods of time.²³⁶ Section 301 provides that the purpose of the Act is "to provide for the use of such channels [of radio transmission] but not the ownership thereof, by persons for limited periods of time, . . . and no such license shall be construed to create any right, beyond the terms, conditions, and periods of the license."237 But in a flexible radio service, the extent of freedom to use the assigned frequencies would be unprecedented. Since there is no guidance in the 1934 Act or its legislative history as to what characteristics of spectrum use are to constitute "ownership" of spectrum, the Commission is left with considerable leeway in determining the characteristics of radio spectrum use without calling such use "ownership." Consequently, the Commission policymakers and the courts appear to have a great deal of discretion in establishing policies and regulations that promote characteristics of spectrum use that approach ownership.²³⁸

^{232.} See infra notes 239-47 and accompanying text.

^{233.} See infra notes 248-61 and accompanying text.

^{234.} Although the FCC continues to require a license, there would be minimal regulatory oversight and virtually no chance of having a license revoked. See infra notes 239-47 and accompanying text.

^{235.} In fact, no private rights were intended to be created at all. See Daly v. CBS, 309 F.2d 83, 85 (7th Cir. 1962); Post v. Payton, 323 F. Supp. 799, 801-02 (E.D.N.Y. 1971). And, licensees are required to sign "a waiver of any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States" 47 U.S.C. § 304.

^{236.} See 47 U.S.C. § 307(c); see also supra notes 40-48 and accompanying text.

^{237. 47} U.S.C. § 301.

^{238.} There are several characteristics of ownership that are logical to examine in an effort to determine the extent to which use of a radio frequency approaches "ownership thereof." A court, as well as the Commission, could look at the following factors to determine if a flexible radio service transgresses the statutory ownership prohibition. These characteristics are (1) the extent that the occupant of the spectrum has control or authority over the use of that spectrum, without government oversight; (2) an ability to "sublease" spectrum for supplemental, alternative, or different uses without prior government approval; (3) the extent that the occupant may use the spectrum in perpetuity; and (4) the degree of protection from a third party's desire to wrest control over the spectrum from a current occupant. Some argue that "deregulation" in effect moves the broadcast industry much closer to "owning" its frequencies. The recent Chairman of the FCC, Mark Fowler, supports replacing the current renewal process with a fee to be paid by spectrum users. See, e.g., Fowler & Brenner, supra note 9, at 247-

Recently, the Commission has moved toward giving broadcast licensees increased autonomy over the use of their frequencies.²³⁹ Specifically, the Commission has authorized FM licensees to use their subchannels for any lawful and nonbroadcast purpose, 240 granted similar authority to AM licensees,241 authorized television licensees to use their vertical blanking interval for nonbroadcast purposes, 242 and allowed broadcast licensees to lease the "excess capacity" of auxiliary broadcasting facilities. 243 The recent proposal for a flexible radio service is consistent with these decisions, but goes much further. In the past, broadcast licensees had been given increased flexibility only over communications channels that are ancillary or auxiliary to the main purpose of the spectrum allocation.²⁴⁴ A flexible radio service, however, would give flexibility to the essential and primary purpose for which the allocation was initially established.²⁴⁵ For the first time, a licensee providing broadcast service could decide, sua sponte, to cease broadcasting and reconfigure the spectrum allocation to provide land mobile service.²⁴⁶ No prior government approval would be necessary.²⁴⁷

^{55.} In recent years, the Commission has expanded the uses to be made of broadcast frequencies. See infra notes 240-45 and accompanying text. Some have argued that the Fowler Commission's "marketplace" approach to regulation is inconsistent with the FCC's mandate to license stations in the public interest. See generally Campbell, supra note 114 (questioning whether the Commission's initiatives to deregulate the radio industry are consistent with the public interest).

^{239.} See infra notes 240-43 and accompanying text.

^{240.} See In re Use of Subsidiary Communications Authorizations, 53 Rad. Reg. 2d (P & F) 1519 (1983) (providing authority for FM broadcast stations to use their subcarriers for non-broadcast purposes). FM subcarriers are radio channels that are transmitted along with the main, or "public" channel, but which cannot be received without a specially equipped FM receiver. See 47 C.F.R. §§ 73.293, 73.295 (1986).

^{241.} See In re Use of the AM Carrier Signals, 100 F.C.C.2d 5 (1984) (authorizing AM broadcast stations to transmit subsidiary signals that do not interfere with main channel programming); see also In re Use of the Carrier for AM Utility Load Management Purposes, 51 Rad. Reg. 2d (P & F) 798 (1982) (AM stations permitted to control electricity demand through the use of nondisruptive signals).

^{242.} A television station's "vertical blanking interval" is a window of time during television signal transmission within which data communication services can be carefully inserted without visibly impairing television reception quality. See Vertical Blanking Interval, 101 F.C.C.2d 973 (1985) (expands authority of TV licensees to use vertical blanking interval for nonbroadcast services); see also In re Transmission of Teletext by TV Stations, 53 Rad. Reg. 2d (P & F) 1309 (1983) (broadcasters allowed to transmit teletext on the vertical blanking interval for nonbroadcast purposes), reconsideration granted in part, 101 F.C.C.2d 827 (1985).

^{243.} See Broadcast Auxiliary Facility Sharing, 93 F.C.C.2d 570, 573 (1983) (authorizing all broadcast licensees to "share" their auxiliary facilities with any "other entity [broadcast or nonbroadcast] for transmission of any material, broadcast or nonbroadcast").

^{244.} See UHF Notice, supra note 20, at 25,595.

^{245.} Id.

^{246.} Id.

^{247.} Id.

The issue presented by the flexible radio service is whether the autonomy granted to flexible licensees is sufficient to be considered "ownership" within the meaning of the 1934 Act. It is axiomatic that the statute limits the Commission's discretion to confer ownership rights because of the necessary government license. Thus, if the license itself is deemed to convey ownership rights, the statute is transgressed.

b. Periodic Renewals and the Flexible Radio Service

If a flexible licensee could expect to hold its license in perpetuity, then de facto ownership of spectrum would exist. In a flexible radio service such de facto ownership will occur unless the Commission has some reasonable means to evaluate whether licenses should be renewed. Without meaningful license renewal criteria, the Commission cannot renew flexible licenses on a rational basis, and proceedings to revoke a flexible license necessarily would be arbitrary in nature.

The 1934 Act requires the Commission to license stations for limited periods of time. 248 Interested parties may petition the Commission to deny an incumbent licensee's renewal application as well as an original application for a new broadcast station. 249 When a challenge is brought to the license renewal of an incumbent broadcaster, the Commission compares the promised performance of the challenger with the past performance of the incumbent and, according to a complex set of comparative factors, makes a public interest finding to either grant or deny the renewal application. 250 Though there is no guarantee that licenses will be renewed, as a practical matter, denials of renewal applications after comparative proceedings rarely occur. 251 Over an extended period of time, a licensee learns that it may continue to operate on its assigned frequency in perpetuity, thereby gaining a de

^{248.} See 47 U.S.C. § 307(c); see also supra notes 40-48 and accompanying text.

^{249.} See 47 U.S.C. § 309(d); see also supra notes 234-38 and accompanying text.

^{250.} A license is renewed only after a Commission determination that such a renewal would serve the public interest. See 47 U.S.C. § 309(d). A glimpse of the murky world of comparative license renewal standards can be found in Cowles Florida Broadcasting, Inc., 60 F.C.C.2d 372 (1976), clarified, 62 F.C.C.2d 953 (1977), vacated and remanded sub nom. Central Florida Enterprises v. FCC, 598 F.2d 37 (D.C. Cir. 1978), on remand sub nom. Cowles Broadcasting, Inc., 86 F.C.C.2d 993 (1981), aff'd sub nom. Central Florida Enterprises v. FCC, 683 F.2d 503 (D.C. Cir. 1982), cert. denied, 460 U.S. 1084 (1983) and in Kuklin, Continuing Confusion: The Renewal of Broadcast Licenses, 27 St. Louis U.L.J. 95 (1983).

^{251.} See Central Florida Enterprises v. FCC, 683 F.2d at 510 ("We suspect that somewhere, sometime, somehow, some television licensee should fail in a comparative renewal challenge, but the FCC has never discovered such a licensee yet." (emphasis in original)). The problem presented by comparative license renewals is how to compare the incumbent's past performance as a licensee with the promises and expectations of the challenger on renewal. See Anthony, Toward Simplicity and Rationality in Comparative Broadcast Licensing Proceedings, 24 STAN. L. REV. 1, 3-4 (1971); Kuklin, supra note 250; Comment, Comparative License

facto property interest in spectrum.²⁵² The drafters of the 1934 Act surely did not intend for the Commission to confer de facto property interests to spectrum users.²⁵³

In a flexible radio service, the licensee's assurance of continual renewal of its license would be much greater than the assurance held by today's broadcast licensees. There is much less of a substantive basis on which to make comparative evaluations of flexible licensees. But in today's broadcast service the challenger, at a minimum, is required to offer the same type of fundamental communications service as the incumbent. In a flexible radio service, however, the challenger could propose a different communications service, thus adding an additional dimension to the Commission's public interest determination. The Commission states that it would ignore the type of service offered in making comparative evaluations of assignments on available channels for renewals and in issuing new licenses. The Commission would base its decisions on mutually exclusive applications on "overall performance." Yet, the Commission does not specify how it would make the requisite public interest determination upon license renewal, or how the performance of different communications services would be compared.

Whatever the criteria used to judge "overall performance" turn out to be, broadcast licenses for channels 50-59, but not other broadcast licenses on different channels, could become subject to a different standard of renewal. Alternatively, a flexible licensee providing common-carrier service could become vulnerable to the types of renewal challenges that traditionally face broadcasters. And, in a true market for spectrum, it should be econom-

Renewal Hearings and Protection of the "Public Interest": Central Florida Enterprises v. FCC, 92 HARV. L. REV. 1801 (1979).

^{252.} Former Commissioner Robinson stated, "a property right does in fact exist as a consequence of the historic practice of renewing licenses except for misbehavior. To pretend otherwise is to blink at reality." Cowles Florida Broadcasting v. FCC, 60 F.C.C.2d at 446; see also Fowler & Brenner, supra note 9, at 247 ("Indeed, the reasonable expectation of license renewal enjoyed by broadcasters today comes close to a property right, in reality if not in name.").

^{253.} See supra notes 235-37 and accompanying text.

^{254.} See 47 U.S.C. § 307(a)-(d) (generally applies to the issuance and renewal of licenses for broadcasting).

^{255.} See infra note 260 and accompanying text.

^{256.} See UHF Notice, supra note 20, at 25,595; cf. Plans and Policy Report, supra note 118, at 43-44 (arguing that the Commission may designate whatever comparative issues it finds applicable).

^{257.} See UHF Notice, supra note 20, at 25,595; see also infra notes 258-61 and accompanying text. The problem of license renewal generally is avoided by using a "pure" market approach, i.e., by creating a system wherein property rights to spectrum are defined such that it is no longer necessary for the FCC to allocate or police the use of spectrum, or to renew licenses. See De Vany, supra note 154, at 1533-34.

^{258.} See UHF Notice, supra note 20, at 25,595.

ically viable, at some point, to invoke the renewal process to litigate for a license rather than purchase a license.

In the renewal circumstances of a flexible radio service licensee, the renewal expectancy must be greater than the renewal expectancy of current television broadcasters. The Commission would be faced with determining renewal challenges from applicants proposing or using different types of communications services. Thus, a flexible licensee would have a much greater degree of certainty to operate the license in perpetuity. While still subject to periodic license renewal challenges, the renewal process would be rendered nearly meaningless for flexible licensee renewal participants. He renewal participants whether such certainty of license renewal rises to the level of "ownership" of spectrum is an issue only a court of competent jurisdiction can decide.

3. Right to a Hearing Requirement and The Flexible Radio Service

Another statutory obstacle encountered by authorization of a flexible radio service is the requirement for full hearings contained in section 309(e) of the 1934 Act. In Ashbacker Radio Corp. v. FCC, ²⁶² the Supreme Court interpreted section 309(e) of the Act to require the Commission to hold a comparative hearing where two or more mutually exclusive uses of radio frequency spectrum are presented. Even though Ashbacker involved mutually exclusive original applications for licenses, its principle governs renewal applications where rival applicants challenge licensed incumbents. ²⁶³ In all cases, however, the notion of mutually exclusive applicants applies to

^{259.} From an administrative viewpoint, the block allocations system makes the Commission's job easier when it comes to evaluating renewal challenges to incumbent licenses. When the Commission creates the initial block allocations by rulemaking, it decides which of several competing communications services is to have priority. See supra notes 61-73 and accompanying text. Under a flexible radio service, the Commission may have to make these decisions each time a flexible license comes up for renewal. See UHF Notice, supra note 20, at 25,595.

^{260.} See UHF Notice, supra note 20, at 25,595.

^{261.} See supra notes 248-59 and accompanying text.

^{262. 326} U.S. 327 (1945). In Ashbacker, the Commission, having two mutually exclusive applications before it, granted one and designated the other for hearing, leaving one application in control of the radio frequency and the other with the greater burden of challenging a now incumbent licensee. *Id.* at 328.

^{263.} See New South Media Corp. v. FCC, 685 F.2d 708, 714 (D.C. Cir. 1982); Citizens Communications Center v. FCC, 447 F.2d 1201, 1210-12 (D.C. Cir. 1971). In Citizens, the court overturned the 1970 FCC policy statement limiting the comparative renewal hearing to a single issue—whether the incumbent licensee had rendered substantial service in the past. Id. at 1211-12. In the Commission's view, if such service were found by the hearing examiner, the comparative hearing ends and the incumbent license would be renewed without an opportunity for the challenger to compare his promised service against the incumbent's broadcast record. Id. The Commission has much discretion in evaluating the particular factual circumstances that warrant a § 309(e) hearing. See United States v. FCC, 652 F.2d 72, 90-91 & n.87 (D.C. Cir. 1980) (en banc) ("The substantiality and materiality of purported issues of fact, . . . are

licenses to compete in the same communications service.²⁶⁴ As the Commission noted, *Ashbacker* has never been applied in either an allocation or a rulemaking proceeding.²⁶⁵ But competition before the Commission, among qualified applicants and for favorable comparative consideration, is considered to be the process most likely to serve the public.²⁶⁶ Thus, the legal issue is whether the FCC is required to accept competing applications and conduct comparative hearings if (1) an existing television broadcaster becomes a flexible licensee and continues to provide television service; or (2) a flexible licensee decides to change service from a broadcaster to, for example, land mobile service.²⁶⁷ In either case, *Ashbacker* rights may apply.²⁶⁸

The extent that Ashbacker would apply to a transition from a TV licensee to a flexible licensee providing TV service is unknown. So, too, is the extent to which Ashbacker rights may attach when a flexible licensee changes service from a television broadcaster to a land mobile service provider. But the statutory right to a hearing cannot be limited to a single issue, and must depend on all relevant criteria. Thus, the Commission may avoid Ashbacker issues by the innovative finding that viewers will benefit if statu-

issues to be evaluated . . . by the Commission. [The] court's oversight role is quite limited ").

^{264.} See UHF Notice, supra note 20, at 25,595.

^{265.} See WBEN, Inc. v. United States, 396 F.2d 601, 617-18 (2d Cir.) (no separate evidentiary hearing required where every licensee is granted presunrise authority by rulemaking), cert. denied, 393 U.S. 914 (1968); UHF Notice, supra note 20, at 25,597; see also United States v. Storer Broadcasting Co., 351 U.S. 192, 202-05 (1956) (notwithstanding statutory hearing requirement, the Commission retains power to promulgate rules of general application, such that the Commission effectively determines the public interest for each applicant); American Airlines, Inc. v. CAB, 359 F.2d 624, 629 (D.C. Cir.) (rulemaking power should not be "shackled... by importation of formalities developed for the adjudicatory process"), cert. denied, 385 U.S. 843 (1966).

^{266.} Community Broadcasting Co. v. FCC, 274 F.2d 753, 759 (D.C. Cir. 1960).

^{267.} See UHF Notice, supra note 20, at 25,595.

^{268.} Id. In the UHF Notice, the Commission overlooked the central issue addressed in Ashbacker: that the § 309(e) right to a hearing requirement prohibits the Commission from granting "one [license] that effectively precludes the other." 326 U.S. 327, 330 (1945). Compare id. with UHF Notice, supra note 20, at 25,595-97. Otherwise, the promise of a hearing is "an empty thing." Ashbacker, 326 U.S. at 330. Indeed, the concept of mutual exclusivity is central to the Ashbacker doctrine. See, e.g., Washington Utils. & Transp. Comm'n v. FCC, 513 F.2d 1142, 1165-66 (9th Cir.), cert. denied, 423 U.S. 836 (1975).

^{269.} See Community Broadcasting Corp. v. FCC, 363 F.2d 717 (D.C. Cir. 1966); see also South Fla. Television Corp. v. FCC, 349 F.2d 971 (D.C. Cir. 1965); Johnston Broadcasting Co. v. FCC, 175 F.2d 351, 356-57 (D.C. Cir. 1949). Comparative criteria consistently have been applied to renewal proceedings. A § 309 hearing can also be required to determine whether a new competitor would damage service "to an extent inconsistent with the public interest." See Carroll Broadcasting Co. v. FCC, 258 F.2d 440, 443 (D.C. Cir. 1958). The Carroll doctrine, however, has never been invoked to deny the grant of an application for a new broadcast station. See supra note 93 and accompanying text.

tory hearing rights are denied to potential flexible licensees. The Commission should keep in mind, however, that comparative considerations apply to the type of communications service provided as well as the substantive qualifications of the applicants.²⁷⁰

B. Flexibility and the Public Interest Standard

The statutory public interest standard confers on the Commission broad discretion to allocate frequencies.²⁷¹ The issue presented by the flexible proposal is whether the flexible radio service is consistent with the 1934 Act's public interest standard, even where the proposal encompasses a fundamental change in the historical block allocation process by which the Commission administers the current statutory scheme.²⁷² Thus, a Commission finding that establishment of a flexible radio service is in the public interest carries significant consequences.²⁷³ Among other issues, the Commission should determine whether, in a flexible radio service, price alone is a satisfactory manner to determine the best public interest use of spectrum; and whether competing, noneconomic factors are less important to the public interest.²⁷⁴

Implicit in the Commission's proposal to use market forces is the premise that a market allocation system, where the use of available spectrum is determined by the entity that pays the highest price, is itself in the public interest.²⁷⁵ The assumption is that economics alone can determine the public interest.²⁷⁶ But a purely economic approach ignores the social or otherwise public aspects of spectrum allocations;²⁷⁷ it is difficult to place a value on

^{270.} See NBC v. United States, 319 U.S. 190, 216-17 (1943).

^{271.} See supra notes 55-58 and accompanying text.

^{272.} See supra notes 61-73 and accompanying text.

^{273.} See supra notes 67-73 and accompanying text.

^{274.} See infra notes 275-82 and accompanying text.

^{275.} Employing a price mechanism to determine spectrum use should be distinguished from employing a price mechanism to determine who will use spectrum for a previously FCC-determined purpose. Arguably, today's lively market in television station trading is a market allocation system: use of a television channel goes to the entity willing to pay the highest price. Cf. Fowler & Brenner, supra note 9, at 231-33 (stating "a key resource in broadcasting, exclusivity of radio spectrum, is allocated by governmental decision, not by price").

^{276.} See UHF Notice, supra note 20, at 25,595; Fowler & Brenner, supra note 9, at 210; cf. Federal Power Comm'n v. Texaco, Inc., 417 U.S. 380 (1974) (where Federal Power Commission (FPC) is required by statute to ensure rates for natural gas are "just and reasonable," FPC may not rely exclusively on market prices to determine rates).

^{277.} See De Vany, supra note 154, at 1256-57; Johnson, supra note 68, at 523 ("The government must interfere with the pricing mechanism in situations where the market can no longer be counted on for efficiency or equity."); Jones, supra note 66, at 90; see also Robinson, supra note 39, at 1256.

social or other noneconomic components of the public interest.²⁷⁸ The problem faced is the impossibility of comparing, on an economic basis, two or more fundamentally different uses of spectrum. Under the flexible radio service envisioned by the Commission, a police department would be eligible to purchase from the incumbent television broadcaster the right to use television channel 50 in a particular locality.²⁷⁹ Unlike commercial broadcasting, a police department does not produce a dollar profit that can be analyzed in order to establish the value of one television channel's worth of police communications. Instead, the business of police communications is public service, and the intangible profit is difficult to measure. The valuation yardsticks used by the police department are fundamentally different than the valuation yardsticks used by the television broadcaster.²⁸⁰

Even where a commercial, profit-making communications enterprise wishes to acquire a flexible license to use spectrum, several traditional public interest factors are ignored where economics alone determines spectrum use. Certainly, two or more private commercial enterprises can be rationally compared and valued. But different problems emerge. When a particular spectrum use may be so profitable that it attracts a large amount of spectrum use, less profitable but publicly useful services could be minimized or even phased out completely.²⁸¹ In other words, the market's supply and price of a particular communications service may not comport with the public's expectations.²⁸² The current allocation scheme shelters less profitable services from being influenced by the success of higher profit services. A market system, therefore, may prejudice less profitable services even where some public utility or demand is present.

^{278.} See, e.g., Gellhorn, supra note 14, at 473-74; see also supra note 194 and accompanying text.

^{279.} See UHF Notice, supra note 20, at 25,595.

^{280.} See Robinson, supra note 39, at 1257.

^{281.} Market enthusiasts will argue that such an outcome is itself in the public interest; that, as a less-profitable use becomes less common, demand for that service will rise thus increasing its profitability making it more attractive to use; and, that as the supply of the profitable enterprise becomes large, it will become increasingly less attractive for new entrants. The net "market" effect is to come to a supply/demand balance. See Fowler & Brenner, supra note 9, at 210-12. However, the supply/demand economic balancing only makes sense where a supply/demand balance is in fact realistic. As long as spectrum is considered to be technically scarce, it is possible that some spectrum uses are so profitable as to use up all available spectrum even where alternative spectrum uses are equally attractive. See infra notes 288-91 and accompanying text.

^{282.} For example, it is possible that one type of service could become predominant over other types, possibly leading to a monopoly of one communications service in a particular area. See UHF Notice, supra note 20, at 25,595-97; PLANS AND POLICY REPORT, supra note 118, at 1-4.

C. Practical and Administrative Difficulties

Another issue raised by the UHF Notice is that the Commission may experience difficulty in the administration and enforcement of a flexible radio service where the Commission would no longer be responsible for classifying the nature of a particular type of communications service, other than simply deeming the licensee to be "flexible." Licensees would choose regulatory regimes and simply notify the Commission of their self-declared status. ²⁸⁴ The Commission states that the flexible licensees' decisions would be subject to Commission review²⁸⁵ but leaves unspecified the precise means for doing so. ²⁸⁶ Thus, it is unclear how the Commission would enforce the regulatory regime chosen by the licensee or how the status of licensees would be determined in borderline cases. ²⁸⁷

Moreover, to the extent a market in spectrum could be established, it would be a tilted market for several reasons. Because of television broadcasters' heavy existing investment in plant and equipment, there is an inherent market bias toward keeping services the way they are. The investment by a television broadcaster in equipment—easily tens of millions of dollars—is worthless to a flexible licensee endeavoring to provide land mobile communications. At the outset, therefore, the value of the flexible license is greater to a prospective licensee desiring to duplicate the incumbent's service than it is to a prospective licensee faced with the task of building a new communications system essentially from scratch.²⁸⁸ Second, there is a kind

^{283.} See UHF Notice, supra note 20, at 25,597 (flexible licensees would be required to "describe and classify the service to be provided under the flexibility option").

^{284.} See id. at 25,595. However, customer-programmers of flexible licensees who elected common-carrier status are presumably subject to title III broadcast regulation. See National Ass'n of Broadcasters v. FCC, 740 F.2d 1190, 1199-205 (D.C. Cir. 1982); see also supra note 148 and accompanying text.

^{285.} UHF Notice, supra note 20, at 25,595; cf. Direct Broadcast Satellites, 90 F.C.C.2d 676, 706-11 (1982).

^{286.} See UHF Notice, supra note 20, at 25,595-97.

^{287.} The enforcement dilemma faced by the Commission is how to review licensee compliance with applicable rules when the licensee (1) characterizes for itself the appropriate regulatory classification, and (2) is the primary source of information on which Commission enforcement is predicated. A constant source of difficulty for administrative regulatory agencies like the FCC is that nearly all essential information necessary for effective regulation is in the hands of the regulated industry. See Hagelin & Wimmer, Broadcast Deregulation and the Administrative Responsibility to Monitor Policy Change: An Empirical Study of the Elimination of Logging Requirements, 38 FED. COMM. L.J. 201 (1986) (information from industry is essential to monitor and evaluate regulatory reform); see also Breyer, Two Models of Regulatory Reform, 34 S.C.L. Rev. 629, 631-35 (1983) (effective airline regulatory reform requires information from industry).

^{288.} In a sense, the block allocation plan provides certain guarantees that may be necessary for a communications business to exist at all. For example, television receiver manufacturers

of "one way ratchet" potentially at work. It is easier to create many small bandwidths from one large bandwidth than it is to reassemble a large bandwidth once it has been broken down. And there is much more freedom to design land mobile communications systems than there is in designing a broadcast system, because land mobile transmitters may be placed anywhere within the designated service area while a television station must centrally locate its transmitter so that its signal is available throughout the entire allocation area. To convert from television to land mobile, the flexible licensee need only partition the available spectrum and begin service; but to convert from land mobile to television, all the land mobile "pieces" must be reassembled. 291

IV. CONCLUSION

The Commission's proposal for a flexible radio service is an innovative approach to solving a long-standing broadcast and land mobile spectrum allocation dispute. The proposal attempts to respond to many commentator's criticisms of the conventional block frequency allocation process. While the Commission undoubtedly has broad discretion to interpret the 1934 Act's public interest standard, it is questionable whether the Commission can define the public interest standard so broadly as to delegate to private parties the basic spectrum allocation questions Congress delegated to the Commission. At the same time, the Act does not allow the Commission to define the public interest standard so narrowly as to exclude from consideration many traditional public and societal concerns. Nevertheless, the Commission seems determined to define the public interest in terms of stark marketplace economics.

There are other troublesome practical difficulties unresolved by the Commission's proposal. Even if authorized, a flexible radio service may never

should have a reasonable expectation that the purchasers of their receivers will, in fact, receive television transmissions. See supra notes 195-96 and accompanying text.

^{289.} In contrast to the six MHz bandwidth of a television channel, land mobile channels typically are 25 kHz wide. Thus, there are potentially 240 land mobile channels available in each television channel. See supra note 168 and accompanying text. It is also a tilted market because a flexible radio service must be established in frequencies now used for television service. There is no practical way for a television service to begin on land mobile frequencies. See Robinson, supra note 39, at 1255 ("Although it might be feasible to transform broadcast into nonbroadcast frequencies, it does not seem practicable to do the reverse because present sets could not receive the new frequencies and manufacturers could not be expected to produce special receivers for each location.").

^{290.} See 47 C.F.R. § 73.685(a) (1986) (providing guidance to television licensees on optimal location of central transmitter).

^{291.} If the would-be television service provider offered compensation, the possibility exists that exorbitant prices could be paid to "hold-out" land mobile services.

actually become "flexible" when the economic barriers to change service are large. Television broadcasters have millions of dollars invested in plants and equipment. This investment is worthless to an entity wishing to engage in a different type of communications service. It is unlikely that a television broadcaster would abandon a multimillion dollar investment in fixed assets for a try at an entrepreneurial alternative communications enterprise. But if a flexible licensee providing television service does switch to a different type of communications service, Commission review of the decision would be minimal at best. Finally, the current block allocation system does offer some administrative advantages. Under the current system, the Commission need make a public interest comparison of diverse communications services only once—by rulemaking, at the time the initial block of spectrum is allocated for a Commission-specified communication service. Under a flexible radio service, such decisions may have to be made each time a license is renewed. On a challenge to an incumbent's license renewal, the Commission could be faced with the task of comparing, on a public interest basis, two or more fundamentally different types of communications services for each flexible license being renewed. The Commission, therefore, may be undertaking a potentially significant administrative burden.

However, the most troublesome issue is the delegation to private parties of spectrum use decisions that Congress intended to delegate to the Commission. Thus, the flexible radio service proposal appears to transgress the "trusteeship" model established by the 1934 Act and affirmed in the NBC case and its progeny. Even so, the flexible radio service proposal would solve some of the acknowledged deficiencies of the current block allocation process. For the FCC to create a flexible radio service, the 1934 Act should be modified. Specifically, the Act should (1) remove the periodic renewal requirement for licensees in a flexible radio service; (2) declare that flexible licensees may operate in Commission-designated spectrum subject to minimal Commission supervision, and that such operation characteristics do not constitute "ownership" for purposes of section 301; and (3) generally state the desirability of allowing, where feasible, the use of local market forces to directly influence communications in local areas without the need for the Commission to interpret the public's wants and desires. If necessary, Congress may wish to authorize a spectrum experiment.

If the Commission inaugurates a flexible radio service, it will stretch the language of the Communications Act of 1934 significantly further than the Act's drafters intended. The Act's vision of radio spectrum regulation would, in effect, become no regulation at all. Moreover, to the extent there is controversy concerning the fundamental meaning of a 1934 law in the 1980's, it should be Congress, not the Commission, that establishes or

changes policy. The power to change the basic application of the Act clearly resides with Congress. For these reasons, if the Commission wishes to pursue establishment of a flexible radio service, it should seek and obtain clarifying statutory authority.

Michael C. Rau*

^{*} The author is an employee of the National Association of Broadcasters (NAB). The views expressed in this Comment are those of the author and do not necessarily reflect the position of the NAB or its members.