I. INTRODUCTION

As a Commissioner of the Federal Communications Commission ("the Commission"), I face the challenge of determining how best to regulate—or, at times, not regulate—the continuously growing and evolving communications industry. Absent specific statutory mandates, I must ascertain the best approach to maximize consumer welfare, increase competition, promote diversity, and foster innovation—in other words, how best to further the public interest. What I have discovered—at the outset of my tenure and throughout my years in industry and government—is that when a licensee's self-interest generally coincides with the public interest, government should be particularly reluctant to intervene absent specific evidence of "bad acts." Private actors understand their businesses better than regulators do and are far better able to respond to market changes and technological innovation than government can. Below I discuss two groups of licensees that illustrate how this convergence of public and private interests manifests itself in the policymaking process. These demonstrations of regulatory restraint provide important lessons in how to promote the people's interest by harnessing private interests.

Each policymaker assessing the proper role of regulation agrees that increasing consumer welfare is desirable. Views often differ, however, about whether the public is better served in a particular instance by government intervention. Many scholars have recognized that "[i]t has never been shown that, as a general matter, A can do a better job of choosing for B than B can do for himself, especially when A is a state agency or official that has limited knowledge of B's life plans . . ." 2 When it is not clear that B's interest and the public interest conflict, it is particularly important for government to show restraint. Government should not intervene merely due to speculation about possible harms or due to a perception that regulators know the most precise "right" way to bring about consumer benefit. I believe licensees—not the government—should identify the steps regarding how to achieve their goals absent any specific congressional policy directives to the contrary or evidence of "bad acts," such as imposition of negative externalities on third parties. This is particularly true where it seems that licensees' interests can be most readily characterized as coinciding with the public interest.

The public benefits by having faith in the markets and in licensees' willingness and desire to
provide services that are valuable to consumers. Imposition of paternalistic regulation could needlessly diminish or eliminate such public benefits based only on speculation about a licensee's potential for "bad acts." This regulatory intervention also tends to err on the side of detailed regulation, which merely addresses a short-term goal. Conversely, the marketplace often achieves longer-term public interest benefits through paths that are not necessarily foreseeable at the time of the government intervention. For example, when the wireless industry was in its nascence, the Commission contemplated detailed rate regulation and coverage requirements as methods of achieving the short-term public interest goals of keeping costs down and providing a minimal service level. Yet by refraining from intervention, the Commission placed its trust in the powers of the marketplace and in licensees' desire to fulfill customer needs for lower prices and better coverage. This allowed the Commission to achieve the longer-term public interest goals of price and coverage competition beyond any regulator's dream in remarkably short order. Obviously there may be instances where a licensee's self interest does not coincide with the public interest (e.g., interference with competitors or other service providers, and incumbent wireline providers' reluctance to open up their local loops to competitors), and in these cases, the Commission should indeed intervene. However, the need to intervene in those instances should not serve as a justification for intervention in all instances.

This article will discuss two situations in which I have concluded that granting licensees flexibility to advance their goals would be far more beneficial than imposing paternalistic regulation. In these cases, the licensees' interests do not conflict, but rather coincide, with the public interest. Thus, advancing these licensees' self-interests also promotes the public interest. The first section of this article looks at the the Commission's recent decision allowing noncommercial educational broadcasters to use their excess digital television capacity for remunerative services. The second section explains the benefits associated with the Commission's decision to give flexibility to licensees in the 2500–2690 MHz band, which is used by operators of Instructional Television Fixed Service ("ITFS") and Multichannel Multipoint Distribution Service ("MMDS").

Both decisions involve licensees that serve the educational needs of society—public television stations and ITFS providers. These instances provide particularly strong examples of the convergence between licensees' interests and the public interest. Government often imposes strict and detailed standards on these publicly-spirited actors in an attempt to save them from themselves, apparently believing that government knows how to achieve their goals better than educational licensees that are dedicated to public service do. I contend that such short-term micromanaging can harm society more than it helps society. If we begin with the assumption that these licensees' missions serve the public interest, then we should reject the notion that government is better positioned than the licensees to assess what is in their interest and how best to deliver their services. Nor is government able to act as timely and effectively as licensees in this regard. Accordingly, the public will be best served if these licensees have the flexibility to offer more innovative services, and I trust that these licensees will act in their self-interest and consequently advance the public interest.

II. USE OF DIGITAL TELEVISION SPECTRUM BY NONCOMMERCIAL EDUCATIONAL BROADCASTERS

Early in my tenure, I was confronted with a number of questions about how Noncommercial Educational ("NCE") licensees could use their digital television spectrum. First, should NCE licensees be allowed to provide non-broadcast ancillary and supplementary services, including subscription services, on their excess digital television capacity for remunerative services. The second section explains the benefits associated with

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3 In the Fifth Report and Order, the Commission awarded each NCE television station a digital channel allotment to facilitate the conversion to digital television. See In re Advanced Television Systems and Their Impact upon the Existing Television Broadcast Service, Report and Order, 12 FCC Rcd. 12809, 12816a, 12956, 12960–61 (1997) [hereinafter Fifth Report and Order].

4 See In re Ancillary or Supplementary Use of Digital Television Capacity by Noncommercial Licensees, Report and Order, 16 FCC Rcd. 19,042, 19,042, para. 1 (2001) [hereinafter NCE Order].
spectrum—revenue that could be used to further their mandate to serve the educational needs of their communities. Faced with the very substantial government-mandated costs of converting their facilities to digital television, public broadcasters were seeking a means to fund the transition and the development of new digital television program offerings.\(^5\) Opponents, however, were worried that allowing NCE licensees to provide such commercial services—particularly advertising—would undermine the value of public television.\(^6\) Concern was expressed that creeping commercialism would not increase a public station’s ability to produce valuable educational programming, but effectively would decrease both the quantity and quality of available noncommercial programming.\(^7\) Thus, I was faced with the decision of how best to ensure that NCE television stations would be able to serve the public effectively in the digital era.

A. Background

To better understand this debate, I first looked at the statute and the current regulatory regime to which NCE licensees are subject.\(^8\) The Commission’s rules have long provided that NCE broadcast stations will be licensed “only to nonprofit educational organizations upon a showing that the proposed stations will be used primarily to serve the educational needs of the community; for the advancement of educational programs; and to furnish a nonprofit and noncommercial television broadcast service.”\(^9\) Traditionally, public broadcasters have financed their operations through private donations and government funding. Congress amended the Communications Act in 1981 to give public broadcasters more flexibility to raise money for their operations. Section 399b of the Act permits public stations to “engage in the offering of services, facilities or products in exchange for remuneration” as long as such uses do not interfere with the stations’ provision of public telecommunications services.\(^10\) The statute, however, does not allow public broadcast stations to make their facilities available “for the broadcasting of any advertisement.”\(^11\)

In the analog environment, public television stations may offer ancillary and supplementary services on a remunerative basis only on their excess capacity (i.e., in the vertical blanking interval (“VBI”)). For example, National Datacast, Inc. is a for-profit subsidiary of the Public Broadcasting Service that provides non-broadcast data services through a television station’s VBI.\(^12\) Public television stations, however, are not allowed to include commercials on their over-the-air video broadcast service.

With respect to the digital channel, Congress granted all broadcasters the discretion to provide ancillary and supplementary services. Section 336 of the Communications Act provides that if the Commission issues additional licenses for advanced television services, it “shall adopt regulations that allow the holders of such licenses to offer such ancillary or supplementary services on designated frequencies as may be consistent with the public interest, convenience, and necessity.”\(^13\) In particular, ancillary and supplementary services cannot denigrate a station’s basic broadcast service.\(^14\) Neither Congress, nor the Commission in its implementing rules, distinguished between...
commercial and noncommercial stations in this regard.\textsuperscript{15} Moreover, the Commission left the decision to each individual broadcaster as to the appropriate mix of services to offer, provided that DTV licensees distribute, at a minimum, one free over-the-air video signal to their viewers and otherwise meet their public interest obligations.\textsuperscript{16} Thus, with the technological capabilities associated with operating in the digital realm, a television station can use its 6 MHz of spectrum to provide high definition television ("HDTV"), multiple channels of video programming and data services.

Congress also placed other limitations on the ability of public television stations to take part in commercial ventures. Because of their status as tax-exempt entities, public stations must engage primarily in activities that further the tax-exempt purposes of their organizations.\textsuperscript{17} With respect to commercial activities that are not related to the tax-exempt purposes of the public television station, income generated from such activities will be taxed.\textsuperscript{18} If the remunerative services become disproportionately large in relation to the primary mission of the public television station, the licensee could lose its tax-exempt status and consequently could lose its television license.\textsuperscript{19} Furthermore, in order to receive funding from the Corporation for Public Broadcasting, public television stations that are not subject to oversight by a state legislature or other political body must establish a community advisory board that reviews the services provided by the station and significant policy decisions of the station. Such oversight helps ensure that a public station is providing programming responsive to its community and in line with its educational nonprofit noncommercial mission.\textsuperscript{20}

B. Providing Public Stations Flexibility to Use Their Excess Digital Television Capacity for Commercial Services Will Further the Public Interest by Giving Such Licensees the Resources to Develop Quality Digital Noncommercial Programming

Congress has specifically permitted public stations to use their excess digital television capacity for remunerative purposes provided that advertisements are not included with any material that is broadcast by the stations. Moreover, I found no reason for the Commission to place any further limits on this authority. Giving NCE licensees flexibility to raise money to support their noncommercial educational digital television programming serves the public interest by furthering the viability of public television. Thus, I supported the decision to allow noncommercial stations to provide non-broadcast ancillary and supplementary services on their excess digital television capacity on a remunerative basis and to include advertising on such services.

1. Statute

First and foremost, Congress has explicitly permitted NCE stations to use their excess capacity for non-broadcast commercial ancillary and sup-

\textsuperscript{15} See 47 U.S.C. § 336(a)(2) (2000); see also 47 C.F.R. § 73.624(c) (2000).
\textsuperscript{16} As the Commission explained:

[O]ur decisions today . . . ensure that broadcasters have more flexibility in their business. Broadcasters will be able to experiment with innovative offerings and different service packages as they continue to provide at least one free program service and meet their public-interest obligations. We choose to impose few restrictions on broadcasters and to allow them to make decisions that will further their ability to respond to the marketplace. We leave to broadcasters’ business judgment such decisions as whether to provide high definition television or, whether, initially, to simulcast the NTSC stream on DTV, and what and how many ancillary and supplementary service to provide. \textit{Fifth Report and Order, supra} note 3, at 12,812, para. 7. Moreover, the Commission stated:

By permitting broadcasters to assemble packages of services that consumers desire, we will promote the swift acceptance of DTV and the penetration of DTV receivers and converters. . . . Indeed, we believe that giving broadcasters flexibility to offer whatever ancillary and supplementary services they choose may help them attract consumers to the service, which will, in turn, hasten the transition. In addition, the flexibility we authorized should encourage entrepreneurship and innovation. For example, it may encourage the development of compression technologies that could allow even more digital capacity on a 6 MHz channel, paving the way for multiple high definition programs and more free programming that would otherwise be offered. \textit{Id.} at 12,822, para. 33.

\textsuperscript{17} See 26 C.F.R. § 1501(c)(3)-1(c)(1) (2002); see also AAPTS \textit{Comments, supra} note 5, at 28.
\textsuperscript{18} See 26 U.S.C. § 513(a) (2000); see also AAPTS \textit{Comments, supra} note 5, at 28–29.
\textsuperscript{19} See 26 C.F.R. § 1501(c)(3)-1(c)(1) (2001); see also AAPTS \textit{Comments, supra} note 5, at 29.
\textsuperscript{20} See 47 U.S.C. § 396(k)(8)-(A)-(B) (2000); see also AAPTS \textit{Comments, supra} note 5, at 29–30.
government doesn't always know best

...
cial basis will give stations more options in providing innovative services in the digital era. It is unclear how the market will embrace digital services. Broadcasters—both commercial and noncommercial—need the flexibility to respond to marketplace developments to offer a mix of services that the public desires.\textsuperscript{29} Inability to have flexibility with their digital bandwidth could inhibit innovation at the threshold of the development of this new technology. Those that support additional restrictions on a public station’s use of its digital spectrum have not necessarily considered the long-term public interest implications of unduly limiting the flexibility and options such licensees may have. For example, a number of new entrants, like Dotcast, are seeking to aggregate digital bitstream from many broadcasters to create a national, wireless high speed network to provide data and video services to consumers.\textsuperscript{30} Public stations could be valuable participants in creating that national footprint. There is no reason to impose artificial and unnecessary barriers that prevent such involvement by NCE stations and hinder consumers’ ability to receive these and other innovative services.\textsuperscript{31}

b. Funding

Providing noncommercial stations with additional funds to support their programming is critical at a time when such stations must incur significant costs to transition their stations to digital and to provide high definition or multiple streams of programming with their digital spectrum.\textsuperscript{32} By contrast, placing heavy restrictions on NCE stations’ ability to raise funds through creative and innovative uses of their digital spectrum, far from preserving public television, could be the cause of its demise. A paternalistic approach could deprive stations of additional funds that are particularly needed to shoulder the additional costs of providing a digital public television service.

Some have recognized the funding issues that public television stations face, but argue that allowing these stations to provide a limited amount of commercial services could result in the loss of needed funding from the federal government and the private sector. Indeed, they recognize that although stations might start out with the best of intentions or the “noblest of goals...they will continue to pursue [commercialism] aggressively to the detriment of other programming,” as additional revenue streams become an essential part of their business plan.\textsuperscript{33} There is concern that commercialism, at any level, will be an invitation to alter the existing source of federal funding because public broadcasters could instead garner revenue from advertisements. Some also fear that commercialism will create a disincentive for viewers to sustain a service that may no longer serve its intended purpose. Critics believe that government can better decide how these stations should maintain their private and public financial support.\textsuperscript{34}

Parameters are in place, however, to ensure that public television stations do not stray far from their primary educational goals and, consequently, lose private and public funding.\textsuperscript{35} As described above, both Congress and the Commission have placed limits on the remunerative activities of public stations that protect and sustain the value and importance of public television. Public broadcasters are aware of and understand the limits placed on them to receive federal funding. I

\textsuperscript{29} The FCC generally should be reluctant to intervene in the marketplace when emerging technologies are concerned, because government is a poor predictor of the direction of industry and technology. It is not that government is ill-intentioned or lacks intellectual capacity; rather, it is extremely difficult to predict the twists and turns of the marketplace. In light of this fundamental difficulty, government humbly should recognize its limits and exercise restraint based on the dangers of exceeding those limits. For a more detailed discussion of this principal, see Abernathy, supra note 1, at 200.


\textsuperscript{31} See Matt Stump, Dotcast Players Say They’re Here to Stay, MULTICHANNEL NEWS, June 4, 2001, at 2; see also SONICHue Licenses ReplayTV Software and Hardware to Support Rollout of Dotcast Digital Network, BUSINESS WIRE, Sept. 19, 2001, at 1–3; see also TIVO Readies New Platform as UltimateTV and WebTV Sales Struggle, AUDIO WEEK, Oct. 1, 2001, at 1–2.

\textsuperscript{32} Indeed, in comments filed with respect to the Fifth Report and Order, Association of America’s Public Television Stations (“AAPS”) and Public Broadcasting Service (“PBS”) stated “that their biggest concern is the ability of noncommercial stations to raise sufficient funds to support current operations and the transition to DTV.” Fifth Report and Order, supra note 3, at 12,851, para. 102.

\textsuperscript{33} Kumar 1, supra note 6, at 7.

\textsuperscript{34} See, e.g., Comments of UCC, supra note 25, at 9–14; see also Kumar 1, supra note 6, at 7.

\textsuperscript{35} See infra § IIA of this article.
trust that they are able to determine the importance of such funding and ensure that they do not cross lines that may put that funding in jeopardy. Moreover, I trust NCE stations to continue to provide a service that is responsive to the tastes and desires of their audience in order to ensure the continuity of viewer donations. There is no reason to doubt their desire and ability to maximize their resources of their audience in order to ensure the continuity of viewer donations. There is no reason to doubt their desire and ability to maximize continuity of viewer donations.

Moreover, I trust NCE stations to continue to provide their communities with innovative educational services, they will continue to have the resources to better serve the public interest.

Mere speculation that licensees may not act in their own best interests should not be the basis for cutting off a potential source of funding for public stations. Furthermore, due to this unsubstantiated fear, such paternalism is inherently inefficient because it deprives the public of the benefits that can be easily associated with flexibility. Public broadcasters are in the best position to understand their audience, their goals and the limits that are placed on their ability to raise funds. Moreover, even if licensees along the way may take steps that hurt their interests, greater benefits can be derived overall from trusting licensees to design their own business plans rather than mandating those plans for them.

In fact, by restricting commercials on spectrum used for non-broadcast television services or further limiting the amount of commercial services public stations can offer, government would risk jeopardizing the viability of digital public television. Without this additional source of funds, public stations may not be able to provide the high quality non-commercial services that communities have come to expect from public television. They may not have sufficient funds to produce programs in HDTV or multicast. Both the

36 As the Commission stated in the NCE Order, "this action will help to preserve the noncommercial educational nature of public broadcasting, while allowing NCE licensees some flexibility in remunerative use of their spectrum and indicating the boundaries that we will apply to such use." NCE Order, supra note 4, at 19,042, para. 17.

37 Indeed, the AAPTS "intends to revise guidelines to ensure that PTV stations use their 'new freedom' responsibly." AAPTS President John Lawson stated that "public television stations' ability to use some of their nonbroadcast digital spectrum to produce revenue would serve as an antidote to creeping commercialism" because presently analog stations are under pressure to run "enhanced" underwriting spots on prime time programming. The guidelines would be strengthened to further two objectives: "(1) To assure that stations use their new funding streams to plow back revenue into developing noncommercial content [; and] (2) To demonstrate to critics that PTV stations will use their freedom to solicit ads on nonbroadcast digital channels responsibly." Kumar II, supra note 7, at 3.

38 An ITFS licensee is required to be an educational institution or a governmental body engaged in the formal education of enrolled students. In addition, nonprofit organizations formed to provide instructional material to enrolled students and nonprofit organizations that would be eligible to be licensees of noncommercial educational broadcast television stations are eligible to become ITFS licensees. See 47 C.F.R. § 74.932(a) (2000). ITFS stations traditionally have

quantity and quality of educational services could decrease and the public would be the ultimate losers.

Public television has played, and continues to play, a vital role in American society and it should be given the opportunity to grow and flourish. A public station’s self-interest is to further the public interest by providing quality educational programming and services. By allowing NCE entities to use their excess digital video capacity for remunerative services and to include commercials on their non-broadcast services, the NCE Order will help strengthen the noncommercial educational broadcasting system. NCE stations will have the flexibility to generate funds to support and enhance their digital operations and to be creative and innovative in how they use their digital television spectrum, while also preserving the non-commercial educational nature of public broadcasting. At the same time, existing regulation and oversight sufficiently ensure and protect the viability of public programming. Furthermore, nothing in the NCE Order requires public television stations to provide commercial services.

I trust that these stations will exercise or decline to exercise these rights responsibly and as they see fit. There is no reason to doubt that public stations will continue to fulfill their public interest role by offering noncommercial educational programming. The NCE Order simply provides such non-commercial broadcasters with the opportunity to enrich such programming offerings for the benefit of the stations, and for the benefit of the American public.

III. FLEXIBILITY IN THE 2500-2690 MHZ BAND

The Commission’s policy in the Instructional Television Fixed Service ("ITFS") and Mul-
tichannel Multipoint Distribution Services ("MMDS") faced a similar fork in the spectrum policy road between markets and mandates. New mobile service providers, eager to get their hands on more spectrum for third generation ("3G") mobile services, called for the Commission to add a mobile allocation to the band and to relocate the ITFS/MMDS incumbents to pave the way for a 3G auction. Not surprisingly, the incumbents had a different view. In defense of the status quo, they cited extensive relocation costs, the success of the current educational offerings in the band and the promise of a wireless broadband pipe. Faced with these difficult choices, I ultimately concluded that the best approach was to put markets to work for the public interest.

A. Background

The MMDS/ITFS band (2500-2690 MHz) has had a long, complex and commercially-troubled history. Regulation has played a significant role in this fate—the Commission often was slow in responding to marketplace changes, resulting in anachronistic limitations on licensees’ ability to serve the public. The band initially was designed, and predominately has been used, for one-way analog video transmission. These services had two “flavors”: (1) video services for education and training in schools, health care centers and other institutions, and (2) a commercial video distribution service known as “wireless cable.”

Over time, the Commission provided these licensees with flexibility to diversify their offerings. In 1983, ITFS licensees were permitted to lease excess channel capacity to MMDS licensees, thereby providing additional income to help underwrite the cost of providing ITFS service. In 1996, the Commission auctioned MDS Basic Trading Area ("BTA") authorizations in the 2150–2162 MHz and 2500–2690 MHz bands. That auction yielded $216.2 million for the U.S. Treasury. Also, in 1996, the Commission first permitted digital use of this band, allowing ITFS/ MMDS licensees to provide multiple channels of video programming and high-speed digital appli-


Id. at 17,222, para. 2.

Id. at 17,222, paras. 3-6 (citing Comments of Sprint Corporation); see also id. at 17,222, paras. 15–17 (citing Comments of the Wireless Communications Association International, Inc.).

Id. at 17,225-26, paras. 8, 10.

See In re Amendment of Parts 2, 21, 74 and 94 of the Commission’s Rules and Regulations in regard to frequency allocation to the Instructional Television Fixed Service, the Multipoint Distribution Service, and the Private Operational Fixed Microwave Service; Inquiry into the development of regulatory policy with regard to future service offerings and expected growth in the Multipoint Distribution Service and Private Operational Fixed Microwave Service; Inquiry into the development of regulatory policy with regard to future service offerings and expected growth in the Multipoint Distribution Service and Private Operational Fixed Microwave Service, and into the development of provisions of the Commission’s Rules and Regulations in regard to the compatibility of the operation of satellite services with other services authorized to operate in the 2500–2690 MHz band; Amendment of Part 21 of the Commission’s Rules to Permit the Use of Alternative Procedures in Choosing Applicants for Radio Authorizations in the Multipoint Distribution Service, Report and Order, 94 F.C.C.2d 1203 (1983); see also Interim Study, supra note 38, at 19; see also 47 C.F.R. § 74.931 (2001).

cations.\textsuperscript{46} By 1998, it became clear that wireless cable applications were struggling in the marketplace due to technical and capital constraints.\textsuperscript{47} In an effort to facilitate development in the band, the Commission authorized the use of two-way transmissions on ITFS/MMDS frequencies, thereby enabling the provision of potentially more lucrative services on ITFS/MMDS frequencies, thereby enabling the provision of potentially more lucrative two-way voice and data services.\textsuperscript{48} Deployment of two-way, digital ITFS/MMDS systems nationwide was designed to give the public another option for high-speed broadband access and to further competition with providers of Digital Subscriber Line ("DSL") and cable modem services, and, in particular, to speed deployment of broadband services to rural areas and to educational users.\textsuperscript{49} In the Two-Way Order, the Commission also expanded its definition of educational usage requirements on the ITFS band, allowing both voice and data services to satisfy the programming requirements.\textsuperscript{50} Thus, ITFS licensees were given the flexibility to provide educational users with broadband access for both video and data applications, becoming an integral tool for educational systems.\textsuperscript{51} An initial filing window for two-way service was opened in August 2000. Following this initial filing window, on April 16, 2001, the Commission commenced a rolling one-day filing window process, which permitted licensees to apply for authorization on a first-come first-served basis.\textsuperscript{52} Approximately 1,600 of those applications were granted by the Commission by January 2002.\textsuperscript{53}

While the MMDS/ITFS band was slowly evolving through various regulatory incarnations, the nation's wireless carriers were in a frantic search for 3G spectrum to meet their expanding capacity and technological needs. At the 2000 World Radiocommunication Conference ("WRC") in Istanbul, the Conference determined that nations would study a variety of bands with the intention of globally harmonized 3G spectrum plans. One of the identified segments was the ITFS/MMDS band at 2500–2690 MHz.\textsuperscript{54} Partially in response to the WRC, the Commission initiated a study by its Office of Engineering and Technology to assess the Commission's options regarding the band. That Office concluded that sharing would be extremely difficult and could cost between $10–30 billion.\textsuperscript{55} This report also found that sharing between existing fixed and new mobile licensees was not a promising alternative. Nonetheless, many mobile wireless carriers believed this band was a strong candidate for 3G, particularly because of the perceived reluctance of government incumbents to vacate some of the other bands identified by the WRC.\textsuperscript{56}

B. Granting Existing Licensees Additional Flexibility in How to Offer Their Services is the Clearest Path to Additional Public Benefits.

In assessing these competing interests, I was extremely wary of the idea that government is always in the best position to mandate solutions to spectrum management problems. Here, the Commis-
sion was presented with two decision points: (1) whether the government should order incumbent MMDS/ITFS licensees to vacate all or part of the band, and (2) regardless of the answer to number one, whether the Commission should allow mobile operations in the band.

1. Government-Forced Relocation

In assessing the utility of government-forced relocation, I looked to the Commission’s prior experience with this policy approach. As a veteran of the PCS and cellular industry rollouts, I understood that there are times when government is left with little choice but to relocate incumbents to pave the way for new services.\(^5\) However, I also understood government-forced relocation to be a drastic solution, with significant delay and substantial transaction costs. In the PCS context, the Commission was certain, as was I, that the value of multiple mobile providers to the American people outweighed the interest of the incumbent fixed microwave licensees’ continued operations in the band. Moreover, there appeared to be readily available relocation bands for the fixed microwave licensees that had occupied the PCS bands. Finally, the costs of relocation appeared to be dwarfed by the potential “upside” applications in the band.

In contrast, these benefits seemed far less clear in the MMDS/ITFS band. The incumbent licensees in these bands provided extremely important educational services throughout the country—in urban centers as well as rural and underserved areas. The MMDS licensees, while only recently granted the flexibility to do so, were in the process of developing and launching a wireless broadband service to the home. A wireless broadband offering is a keystone to spurring broadband competition through offerings from multiple facilities-based platforms. If wireless broadband was not to come from MMDS, it was not clear which spectrum band would provide such an opportunity or when. Thus, relocation would be a serious blow to our policy goal of establishing another broadband pipe to the home. Thus, I was skeptical of the idea of a government mandate to force relocation, distribute relocation costs and find a new home for MMDS. In particular, it seemed paternalistic and potentially misguided to conclude that the possible fixed wireless broadband services to be offered by the incumbents were not worth pursuing.

On the other side of the ledger, I have been a strong advocate of additional spectrum for 3G mobile services. However, I also understood that on the mobile carriers’ “wish list,” the lower bands identified at WRC (for example, 1710–1770) were far more coveted than the MMDS/ITFS bands.\(^6\) Indeed, it appeared that most of the globe would be using the lower bands, eliminating many of the alleged global economies of scale if the Commission were to redesignate the 2500–2690 MHz band.

When faced with the current and future educational operations and the potential for a wireless broadband offering balanced against a possible 3G deployment, I thought the public interest would be better served by the current incumbent operations. The OET report contained extraordinary relocation cost estimates in the tens of billions of dollars.\(^7\) That report also concluded that sharing between incumbent fixed users and new third party mobile service providers was not realistic.\(^8\) In addition, the time and detailed regulatory intervention that would be required to carry out relocation further convinced me that the incumbents’ current operations better served the public interest. Even with all these factors, I might have contemplated relocation, but the Commission had been unable to identify any truly viable bands to which these licensees could be moved.

2. An Added Mobile Allocation.

Once the decision had been made to permit the incumbent operators to remain in the band, the Commission faced a second question: Should the band allocation be changed to allow for policies coming to fruition, including the auction of PCS spectrum.

\(^5\) See In re Redevelopment of Spectrum to Encourage Innovation in the Use of New Telecommunications Technologies, First Report and Order, and Third Notice of Proposed Rulemaking, 7 FCC Rcd. 6886 (1992); see generally BENNET Z. KOBBI, WIRELESS SPECTRUM FINDER 260 (2001). I served as Regulatory Counsel to AirTouch Communications—a wireless carrier—from 1993 until 1998 and experienced these pol-
mobile applications? Section 303(y) of the Communications Act grants the Commission authority to allocate spectrum to provide for flexible use if: (1) such use is consistent with international agreements to which the United States is a party; and (2) the Commission finds, after notice and an opportunity for public comment, that (A) such an allocation would be in the public interest; (B) such use would not deter investment in communications services and systems or technology development; and (C) such use would not result in harmful interference among users. With these answers in hand, how could regulatory policy best balance these interests while providing maximum benefits to the public interest?

As for the first prong of the test, a mobile allocation is consistent with international agreements to which the United States is a party. The second prong presents more difficult issues: What is the public interest here? Would the allocation deter investment? What would the interference consequences be of a mobile allocation?

3. Interference

Addressing these issues in reverse order, the addition of a mobile allocation alone would not alter in any way the existing interference protection afforded to the incumbent licensees. Since there are no current significant interference issues in the bands, the change in allocation would not result in harmful interference among users. In many ways, however, I see this statutory mandate as a guidepost in eventually fashioning the appropriate service rules for the band. That is, can mobile rules be crafted that allow for meaningful mobile use while protecting incumbent operations?

Interference protection lies at the core of the Commission's responsibilities to protect licensees by preventing the externalization of costs through interference. As discussed above, the Commission had already determined that sharing between third-party 3G mobile services and the incumbent MMDS/ITFS licensees was not possible without substantial costs to all parties. In my view, however, the allocation issue is slightly different: Could the Commission, as a responsible interference cop, add to the bundle of rights enjoyed by current licensees? Although the OET report showed challenges associated with shared fixed and mobile use, that examination focused on the possibility of introducing a third party mobile provider through a 3G auction. Here the question was whether the current licensees could cooperatively put a mobile allocation to responsible use. In this regard, I found it significant that licensee cooperation was the driving philosophy behind the rules and interference methodology in the Two-Way proceeding. The Commission stated in the Two-Way Order:

This symbiotic relationship [between licensees] has resulted in a history of cooperation that has allowed MDS and ITFS entities to reach their mutual goals. It also creates an environment that is appropriate for the deregulatory approach we adopt here, which is itself premised on cooperation between all the parties involved rather than on the Commission acting as an arbiter of every possible dispute that may arise, especially in regard to interference resolution.

This demonstrated ability to work together made me even more comfortable with my fundamental trust in the ability of existing licensees to realize and act in their own self-interests to create a set of interference rules that permit a variety of uses to survive and thrive. In contrast, the more paternalistic government view would be that we cannot trust the licensees to act in their own enlightened self-interests, instead government must limit those rights. In the end, I believe that current licensees should be permitted to, and can work among themselves with the Commission, to craft service rules that allow interference-free operations.

4. Investment Impact.

As for flexibility's impact on technological development of ITFS and MMDS, I believe that mobile allocation may provide the impetus for new and innovative services in these bands. This allo-

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62 The 2500-2690 MHz band is allocated in Region 2 (which includes the U.S.) on a primary basis to the Fixed, Fixed Satellite, Mobile except Aeronautical Mobile, and Broadcasting–Satellite Services. See 47 C.F.R. § 2.106 (2001); see also Final Acts, supra note 54 (designating the 2500-2690 MHz band for possible IMT-2000 use).
63 Two-Way Order, supra note 48, at 19,114, para. 4 (emphasis added).
cation harmonizes the U.S. Table with the rest of our region and eliminates any regulatory uncertainty as to whether portable uses are allowed in the band. Regionally harmonized allocations lend themselves to the type of scale and scope that leads to research and product development. Moreover, in light of our conclusions about the need to protect incumbent users, our decision could well spur development of integrated service offerings that allow mobile and fixed services to share more readily. Some companies have already begun experimentation with portable uses in the band, such as IPWireless, Inc.’s operations in North Carolina.\(^{64}\) However, questions have been raised about whether that use would violate the existing fixed allocation. The mobile allocation eliminates that uncertainty and allows IPWireless and other companies to attract additional investment and move forward. Some have argued that the mobile allocation would actually deter investment, thereby violating the statutory mandate of Section 303(y). They contend that by adding a mobile allocation, the Commission would deter investment in the existing fixed services in the band. This is a bit like saying government should prohibit the sale of popcorn as a way to encourage investment in corn flakes. That is, we have a resource (spectrum or corn) that can be used for multiple applications (fixed or mobile, corn flakes or popcorn, respectively). Obviously, if government prohibits the use of one (mobile, or popcorn) it may shift some resources to the remaining available uses (fixed, or corn flakes). But in the end, the ban on one market (mobile, or popcorn) does not create more demand or more of a business plan for the other (fixed, or corn flakes). So, if you are not making money on your fixed allocation, the bar on mobile uses will not make fixed more appealing. The inverse also seems true: If your fixed business is more lucrative, the addition of the mobile allocation will not change your business plan. Moreover, even if an individual licensee (like MMDS) is prevented from choosing a mobile business over a fixed one, the capital markets have no such constraints. Therefore, if fixed makes no sense economically, capital will flow to higher yielding mobile wireless ventures or other investments elsewhere regardless of the addition of mobile allocation in the band. In the end, it is difficult to contend that more flexibility within a band would lessen the investment in a particular fixed application.\(^{65}\)

5. Public Interest Assessment.

Finally, in assessing the public interest, I return to my initial presumption that the market can determine what services are more valued and can respond to such changes in demand far more precisely and more efficiently than government. In this regard, it is important to recognize that the flexibility afforded by a mobile allocation does not require any incumbent licensee to do anything. Rather, it may be that the existing fixed uses continue to dominate the band if they prove to be the highest valued use. To question the assessment essentially amounts to questioning the ability of the American people to assess their own interests. That is, markets are a direct reflection of the cumulative values that individual consumers place on various services.\(^{66}\) Government should not presume that is it is better able to assess the values consumers place on various types of communications services and instead should permit public resources, like spectrum, to be used for these purposes. Where, as here, the self-interest of the licensees seems generally to track the public interest, I believe government is best advised to stand back and allow the marketplace to work.

Existing MMDS/ITFS licensees provide valuable services to the marketplace and the ITFS/MMDS Flexibility Order does not undermine the value of their services. Rather, additional flexibility allows such licensees to improve their services by keeping pace with market and technological

\(^{64}\) IPWireless, Inc. has developed a technology that will allow its customers to utilize modems inside buildings under non-line-of-sight conditions. See ITFS/MMDS Flexibility Order, supra note 40, at 17,222, para. 16; see generally IPWireless, Inc., at http://www.ipwireless.com/tech_over.html (last visited Sept. 27, 2002).

\(^{65}\) However, there are cases where full flexibility is not warranted under the statute. See, e.g., In re Amendment of Part 2 of the Commission’s Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, including Third Generation Wireless Systems; Amendment of the U.S. Table of Frequency Allocations to Designate the 2500-2520/2670-2690 MHz Frequency Bands for the Mobile-Satellite Service, First Report and Order, and Memorandum Opinion and Order, 16 FCC Rcd. 17,222, para. 24 (2001).

changes. In the end, the only goal is to provide licensees with the opportunity to enhance their value through mobile use if the licensees wish to initiate such a service.\footnote{See ITFS/MMDS Flexibility Order, supra note 40, at 31 (citing Separate Statement of Commissioner Kathleen Abernathy).}

With respect to the educational purposes of ITFS licensees, the added flexibility may provide new ways for them to achieve their educational missions. When that self-interest (in maximizing the value of the band) coincides with the public interest (in maximizing service offerings), I believe government acts best when it acts least. Government should trust in the incentives provided by that self-interest and the creativity of the marketplace to design strategies and innovations to achieve the shared goal, rather than crafting paternalistic rules that circumscribe precise steps to achieve the goal based on government’s knowledge and conception of the “correct” path.

Some have argued that adding flexibility undermines the public interest because it represents an unfair windfall to incumbent MMDS/ITFS licensees who value their spectrum based on its permitted uses. Opponents argue that this is particularly problematic because other licensees have paid a substantial sum for their spectrum and now mobile operators highly value MMDS spectrum.\footnote{See, e.g., id. at 8–10 (citing Comments made by Verizon Wireless); see also id. at 13-14 (citing Comments made by Motorola, Inc.); see also id. at 4 (citing Comments made by Cingular Wireless LLC).}

This is a difficult problem. The Commission is constantly put in the position of having to balance the equities in granting rights, limiting rights, auctioning spectrum and responding to technological change. There are abundant examples of disparities in our approach to spectrum management over the years. For example, the original two cellular telephone licensees in each region received their licenses for free.\footnote{See In re An Inquiry Into the Use of the Bands 825–845 MHz and 870–890 MHz for Cellular Communications Systems; and Amendment of Parts 2 and 22 of the Commission’s Rules Relative to Cellular Communications Systems, Memorandum Opinion and Order on Reconsideration, 89 F.C.C.2d. 58 (1982).}

In the inverse of the MMDS problem, cellular and PCS licensees were granted the right to provide fixed operations in their bands, but were not charged for those additional rights or subject to supplemental auctions.\footnote{See In re Amendment of the Commission’s Rules To Permit Flexible Service Offerings in the Commercial Mobile Radio Services, First Report and Order, and Further Notice of Proposed Rulemaking, 11 FCC Rcd. 8965, 8971, para. 11 (1996).}

International satellite systems are barred by statute from auctions, yet their services may soon be substitutable for auction-eligible terrestrial services.\footnote{See 47 U.S.C. § 309(j)(5), (14) (2000).}

And, indeed, these international satellite companies have requested the flexibility to provide terrestrial services in these bands.\footnote{See Ex parte Presentations and Post-Reply Comment Period Filings In Permit-But-Disclose Proceedings, Public Notice, 2001 FCC LEXIS 1453 (rel. Mar. 13, 2001); see also International Bureau Sets Deadlines Concerning Motient/TMI Assignment and Transfer of Control Applications, and Motient’s Request for Second Generation Satellite/Terrestrial Base Station System; Deadline Extended for TMI’s Applications to Assign Earth Stations, Public Notice, 2001 FCC LEXIS 1544 (rel. Mar. 19, 2001).}

Obviously, the initial method of licensing a service must be determined based on the initial service rules.\footnote{See, e.g., In re Implementation of Section 309(j) and 337 of the Communications Act of 1934 as Amended, Memorandum Opinion and Order, WT Dkt. No. 99-87, FCC 02-82, paras. 19–43 (rel. Apr. 18, 2002).}

Therefore, spectrum designated for international satellite or public safety services cannot be subject to auction. To the extent that over time technology or other factors alter the value of the rights we add or subtract, I believe that the Commission should be reluctant to intervene in an effort to craft perfect symmetry in licensing. Having established that sharing is not possible with a new overlaid mobile entrant, MMDS/ITFS licensees are the only parties capable of utilizing the mobile allocation. To deny MMDS/ITFS mobile rights based on a “windfall” would grind regulatory action to a halt. It would also ensure that the public would never benefit from possible mobile uses in the band. Short-changing the public interest in this way seems unnecessarily restrictive. This is especially true when the evolving nature of the Commission’s statutory authority has ensured disparate treatment already. For instance, cellular service was authorized before the Commission had auction authority, international satellite is barred from auction and mutually exclusive terrestrial applications must be auctioned.

The best a regulator can do is to attempt to maximize the cumulative public interest in fully utilizing the national spectrum resource.

MMDS/ITFS licensees and the public are now well positioned to enjoy the fruits of a decade of technological advances and the Commission’s
regulatory labor. We have removed technological restrictions, increased commercial flexibility, made more spectrum available and encouraged technological innovation. The ITFS/MMDS Flexibility Order takes another step towards providing licensees with one more choice on how to further develop and deploy services that meet theirs and the public's needs. As the communications world moves from static analog one-way services to a dynamic digital two-way mobile environment, the ITFS and MMDS licensees in this band will now have the tools for another cycle of innovation, investment and creative new services to better meet the needs of their users. I look forward to the public's opportunity to fully enjoy the benefits of these licensees' entrepreneurship, dedication to community and innovation in the marketplace.74

IV. CONCLUSION

The two decisions discussed above continue a line of Commission and congressional decisions to allow educational licensees more flexibility to provide services that are true to their missions. There can be a significant price placed on consumer welfare when the government—albeit with good intentions—tries to over-regulate licensees whose self-interests coincide with the public interest. In these cases, our licensees know how to achieve their educational goals and serve the public interest better than the government. We certainly should give them the opportunity to do so.

74 See ITFS/MMDS Flexibility Order, supra note 40, at 33 (citing Separate Statement of Commissioner Kathleen Abernathy).