Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Amendment of Parts 1, 21, 73, 74 and 101 of the Commission's Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands	)	WT Docket No. 03-66 RM-10586
	)	
Part 1 of the Commission's Rules - Further Competitive Bidding Procedures	)	WT Docket No. 03-67
	)	
Amendment of Parts 21 and 74 to Enable Multipoint Distribution Service and the Instructional Television Fixed Service to Engage in Fixed Two-Way Transmissions	)	MM Docket No. 97-217
	)	
Amendment of Parts 21 and 74 of the Commission's Rules With Regard to Licensing in the Multipoint Distribution Service and in the Instructional Television Fixed Service for the Gulf of Mexico	)	WT Docket No. 02-68 RM-9718
	)	

COMMENTS OF SPRINT CORPORATION

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SUMMARY

As the leading provider of broadband wireless data systems in the 2150-2162 MHz and 2500-2690 MHz bands, Sprint applauds the Commission's efforts to adopt a new regulatory regime for the 2500-2690 MHz band that will allow licensees to develop and deploy a wide range of third- and next-generation broadband services in an efficient and timely basis.

Sprint believes that this objective can be best achieved by adopting the various changes to the Multipoint Distribution Service and Instructional Television Fixed Service rules contained in the Coalition Proposal jointly submitted by the Wireless Communications Association International, Inc., the National ITFS Association and the Catholic Television Network. The Coalition Proposal bandplan is superior to other options proposed by the Commission because it provides more flexibility to deploy time division duplex or frequency division duplex technology, thereby maximizing licensee choice to design service offerings to meet changes in marketplace demand. Further, the Coalition Proposal's transition plan offers the most flexible method for spectrum migration – providing for a gradual evolution of services on a market-by-market basis – and should enable the prompt deployment of broadband services to meet commercial and educational needs.

Sprint objects to the authorization of "underlay" operations in the 2500-2690 MHz band. There is no basis in the record for authorizing "underlay" operations in the 2500-2690 MHz band. Not only has the "underlay" concept been left undefined, but no data has been offered to demonstrate that such a concept could be effectively implemented without causing harmful interference to licensees. Any "underlay" authorization must not impinge upon the licensees' rights to exclusive use of their spectrum and the right to operate free from harmful interference. Further, because unlicensed devices have no spectrum rights with respect to licensees, they cannot be conferred primary status in unassigned Instructional Television Fixed Service spectrum. Any

changes in this approach would represent a wholesale reversal of 65 years of precedent and would harm both consumers and licensees.

Sprint has concerns that the proposed authorization of operations in the Gulf of Mexico could interfere with Sprint's land-based operations in adjacent areas. Specifically, Sprint is concerned that the unique propagation characteristics of signals over large bodies of water, referred to as "ducting," could result in Gulf operations causing interference to land-based services provided to Sprint customers. The Commission should foreclose such interference by establishing the demarcation line of the Gulf Service Area at twelve nautical miles from the coastline.

Sprint agrees with the Coalition Proposal that a substantial service performance standard is appropriate for the new regulatory regime governing the Multipoint Distribution Service and the Instructional Television Fixed Service. The substantial service performance standard is more adaptable to service offerings than a population-based standard, which is particularly relevant to the flexible use licensing approach that the Commission envisions for the Multipoint Distribution Service and the Instructional Television Fixed Service spectrum. In addition, to account for the technology transitions that the new rules likely will engender, the Commission should find that a licensee has achieved substantial service if it has in fact provided substantial service at some point during the effective dates of its license. Further, construction certifications previously filed for stations within a Basic Trading Area license should entitle the licensee to a renewal expectancy, and the discontinuance provisions set forth at Section 21.303 of the Commission's rules should be deleted or modified to allow for technology transition.

Sprint opposes any increase to the five percent minimum ITFS holdback requirement and supports the Commission's decision leave the existing programming requirements for existing leases unchanged. There is no factual basis to mandate increases to the programming requirement. The high compression rates afforded by digital technology widely available and in use today allow

licensees to provide more programming within the reserved 5 percent of its spectrum than it could using analog technology over 25 percent of its spectrum. In addition, increasing the holdback requirement would cause a proportionate reduction in the monetary consideration available for ITFS licensees that use leasing revenues to fund programming and other educational and instructional services. Further, increasing the holdback requirement could have a severely detrimental impact upon existing lease arrangements, undermining future reliance on secondary market activities.

The two-sided auction process would not be an efficient mechanism for auctioning privately-held spectrum licenses in the 2500-2490 MHz band. Various secondary market mechanisms already exist that allow service providers to consolidate spectrum holdings and licensees to obtain maximum value for their licenses, under terms of their choosing. Further, any two-sided auction operated by the Commission would impose significant transaction costs, such as delays in setting auction rules and an anti-collusion requirements-based freeze in secondary market activities, that do not apply to private market transactions. Further, most of the ITFS spectrum is the subject of Commission-approved lease agreements which may prohibit the licensee from entering into any two-sided auction. Any restructuring auction would require significant licensee participation that could be inconsistent with these existing legal relationships.

Sprint urges the Commission to refrain from adopting cross-ownership or other restrictions on the eligibility of cable system operators, local exchange carriers or commercial mobile radio service providers beyond those currently mandated by Section 613(a) of the Communications Act of 1934, as amended. It is not possible to predict how Multipoint Distribution Service and the Instructional Television Fixed Service spectrum will be used or whether such future use might cause substantial harm in a specific market, because licensees under the new regulatory regime likely will have the flexibility to provide any fixed or mobile service in any market. In any event, if the Commission finds that an individual provider is using spectrum improperly, it may restrict or reject

future assignments and transfers of licenses under Section 310 of the Communications Act. Moreover, such an approach is consistent the market-oriented policies that the Commission now employs.

Instructional Television Fixed Service licensees should be permitted, at their sole discretion, to assign or lease their licenses in whole or in part to commercial system operators. ITFS licensees are in the best position to determine how the disposition of their licenses can best meet the educational and instructional needs of their local community. Such a flexible approach will serve the public interest of enhancing local education and will ensure that the spectrum is put to its highest valued applications.

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COMMENTS OF SPRINT CORPORATION

Sprint Corporation ("Sprint") hereby submits its Comments on the Commission's Notice of Proposed Rule Making and Memorandum Opinion and Order proposing changes to the Commission's rules aimed at facilitating the provision of fixed, portable and mobile broadband access, educational and advanced services in the 2500-2690 MHz bands.[1]

I. INTRODUCTION

Sprint applauds the Commission for initiating this proceeding and addressing the need for a comprehensive examination of the rules and policies governing the licensing of the Instructional Television Fixed Service (ITFS) and the Multipoint Distribution Service (MDS) facilities in the 2500-2690 MHz band (the "2.5 GHz band"). As the NPRM recognizes, the existing rules have long been out of date, stifle efficiency and innovation, preclude mass deployment of next generation cellular broadband wireless systems, and run counter to the Commission's stated goals of "establish[ing] regulatory policies that promote competition, innovation, and investment in broadband services and facilities."[2]

Sprint knows first hand the serious impediments presented by the current rules to use of the 2.5 GHz band. As the Commission recognized in the NPRM, the MDS industry has invested billions of dollars to develop broadband wireless data systems that are capable of providing, among other services, high-speed access to the Internet for residential customers, small and medium businesses, and educational institutions.[3] Indeed, Sprint has been at the forefront of that effort, and alone has invested over two billion dollars. The MDS/ITFS industry is continuing to develop a wide variety of new service offerings and applications and, through their implementation, hopes to improve and expand the quality and range of services offered in the band.

For its part, Sprint has deployed more first generation broadband networks using spectrum in the 2150-2162 MHz and 2.5 GHz bands, covering more population, than any other system operator. The Coalition Proposal explains in detail the significant problems encountered by system operators deploying first generation technology and why they have been aggressively working to develop a

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[1] *Amendment of Parts 1,21,73, 74 and 101 of the Commission's Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz bands,* 18 FCC Rcd 6722 (2003) ("NPRM").

[2] NPRM at ¶ 32, quoting Spectrum Policy Report.

[3] NPRM at ¶ 33.

next-generation technology that is portable or mobile and can be installed by consumers without professional installation. Sprint has been at the forefront of those efforts, having committed enormous time and resources to developing commercially feasible next-generation services, and its service paradigm has evolved considerably. While first-generation FDD technology required an expensive and time-consuming truck roll and installation of a fixed pizza box-sized antenna on a customer's rooftop, the next-generation technology that Sprint has worked to develop merely requires inexpensive, customer-installed non-line-of-sight devices, some as small as PC cards that can be plugged directly into the PCMCIA slot on a laptop computer or Personal Digital Assistant, that can be purchased at a retail store (*e.g.*, a Sprint store or Radio Shack) and installed by the subscriber.[4] Through increased simplicity and portability, as well as substantially higher data rates than are available over 3G mobile services, DSL, or cable modem services, Sprint hopes to bring to market services that offer customers a high-speed, portable or mobile service over the 2.5 GHz band that is unlike anything available through current broadband access technologies.

Tests to date of next-generation systems show considerable promise. Sprint, using Navini Networks' equipment, deployed a non-line-of-sight cellular architecture in Houston, Texas using smart antenna technology that delivers broadband services at multi-megabit rates. The non-line-of-sight signal-processing techniques used in this trial maintained a strong signal and high data rates over large areas that have natural and man-made obstructions.

Sprint and Navini have also tested broadband equipment in Kansas City, Missouri and Overland Park, Kansas. Sprint has conducted a user trial with IP Wireless and Clearwire in Jacksonville, Florida. In addition, Sprint conducted a trial with IPWireless and Inukshuk Internet in Montreal, Canada which offered fixed, portable or mobile broadband services.[5] Sprint is continuing

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[4] *See* "Sprint Tests Broadband Wireless Systems," by Jay Wrolstad, Wireless NewsFactor, May 7, 2002.

[5] Sprint Trial Puts MMDS Back on Track, WirelessWeek by Sue Marek, May 13, 2002.

its testing of next generation broadband services and is evaluating the feasibility of a commercial launch in at least one market within the next year. As testing continues, Sprint hopes to eventually meld services developed in the 2.5 GHz band with other services, such as PCS, PCS Vision, and "WiFi" to provide still greater portability and mobility.

In order to encourage innovative applications and develop the full potential of the band, flexible rules such as those suggested in the Coalition proposal are necessary. Sprint urges the Commission to adopt the rules as proposed by the Coalition.

II. THE COMMISSION SHOULD ADOPT THE COALITION PROPOSAL

Among the NPRM's stated objectives are to: facilitate the development of possible alternative broadband residential facilities-based providers; meet the increasing demand for spectrum-based services, including mobile services; afford greater flexibility to licensees that allow market forces and educational needs to move spectrum to its highest valued use; create regulatory policies that promote the most efficient use of the band; and conduct effective and timely licensing.[6] These goals and others are furthered by the changes proposed in the Coalition Proposal and Sprint is pleased that the Commission has tentatively decided to adopt many of the Coalition Proposal's suggestions in the NPRM. Sprint has been a leading contributor to the Coalition Proposal that gave rise to this proceeding from its inception and continues to support the plan.[7] The proposed changes represent a significant improvement over the existing rules, incorporating principles of sound engineering and spectral efficiency, and will lead to the expeditious delivery of state-of-the-art wireless broadband services across the nation. In the comments below, Sprint addresses several of the issues raised by the Coalition Proposal that are critical if the 2.5 GHz band is to become a viable

[6] NPRM ¶ ¶ 32-43.

[7] A Proposal for Revising the MDS and ITFS Regulatory Regime," filed October 7, 2002 ("Coalition Proposal"); *See*, e.g., Comments of Sprint Corporation, filed November 14, 2002; Reply Comments of Sprint Corporation, filed November 29, 2002. The Wireless Communications Association's Technical Task Group, comprising over 70 members,

alternative for the distribution of advanced wireless services, and will respond to several novel issues raised in the NPRM.

A. The Coalition Proposal's Bandplan Is The Only Plan That Offers The Flexibility To Support Either FDD Or TDD Technology And Promotes Spectral Efficiency And Operational Choice

As the Commission evaluates the proposed bandplans and technical rules presented by the NPRM, a primary consideration must be to afford licensees the maximum permissible flexibility to deploy services and technologies in response to marketplace demand. The Coalition Proposal was specifically designed to achieve that flexibility. Thus, Sprint urges the Commission to adopt the bandplan and technical rules advanced in the Coalition Proposal.

More so than any of the alternatives before the Commission, The Coalition bandplan and technical rules offer licensees the flexibility to deploy either time division duplex (TDD) or frequency division duplex (FDD) technology, and to freely switch between the two as technology develops and marketplace demands evolve. The Coalition Proposal affords this flexibility, while still assuring efficient use of the spectrum, by suggesting a series of novel rules that minimize the potential for interference when non-synchronized technologies (*i.e.* those that do not transmit in the same direction at the same time) either operate on a co-channel basis in neighboring markets or operate on an adjacent channel basis in the same market. Those rules eliminate regulatory burdens where synchronized technologies are at issue, recognizing that synchronization reduces the need for protective regulation. However, where non-synchronized technologies are deployed, the proposed rules fairly balance the need for additional interference protection against the burdens imposed by that additional protection.

Sprint's desire for flexibility is grounded in practical concerns. As noted above, Sprint's first generation broadband systems all utilized FDD technology. However, the field trials Sprint has

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spent many thousands of hours developing the Proposal. Sprint was closely involved in the Proposal's development and

conducted of next-generation technology to date have all utilized TDD technology. As next-generation FDD technology evolves for the 2.5 GHz band, it may ultimately prove best designed to meet marketplace needs. Indeed, Sprint is constantly examining FDD alternatives.

In addition to its need for flexibility in determining whether to use TDD or FDD on an operational basis, Sprint requires such flexibility in order to accommodate its evolving commercial deployment needs. Sprint holds rights to a significant portion of the MDS/ITFS spectrum within its markets and it has developed that spectrum to accommodate multiple businesses. Those businesses include next generation broadband wireless using TDD technologies, wideband mobile technologies using FDD, and backhaul to support high-speed connectivity using FDD and TDD technologies. Over time, the various businesses will evolve and one or more may emerge as the leading business. Sprint's ability to use the spectrum as needed and move between technologies is crucial and it is critical that no spectrum be designated for a technology that might preclude any given business case. The Coalition Proposal's LBS and UBS structure ensures that Sprint can deploy TDD, FDD, or non-synchronized TDD services without being subjected to deployment-stifling greenmail or interference from spectral neighbors.

Affording licensees the flexibility to utilize either TDD or FDD, and to move between the two as circumstances demand, assures that the needs of both the operator's business case, and the marketplace will be met, no matter how they may change.

B. Sprint Supports The Coalition Proposal's Transition Plan

Sprint supports the Coalition's proposed transition plan, which allows for the gradual evolution of services on a market-by-market basis. By carefully crafting a marketplace-oriented approach, the Coalition Proposal assures that transitions occur first in markets where broadband services can be immediately deployed, rather than forcing a fixed-date, complicated and costly

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a Sprint representative served as Task Force Chairperson.

simultaneous transition of all markets, many of which may not see service deployed for several years. Moreover, the Coalition Proposal provides a mechanism by which an ITFS licensee's migration to the MBS will be funded, an important element missing from any of the alternatives suggested by the Commission.

It is imperative that the Commission adopt the details of the proposed transition, including the safe harbors designed to provide guidance to licensees and Proponents, the timelines that assure prompt transitions, and the dispute resolution mechanism. Together, these elements assure that the transition process will not be yet another opportunity for unscrupulous licensees to extract greenmail from system operators. There is no reason for the Commission to provide licensees with lengthy negotiation periods or other avenues to delay transitions. Unlike the situations where incumbents were relocated to entirely new bands, here, the actual transition is relatively simple to implement. Essentially, three steps are involved: 1) new improved downconverters are provided at eligible ITFS receive sites; 2) ITFS eligible programming is shifted to the MBS; and, in those cases where necessary, 3) transmitters are re-tuned to the MBS standard frequencies. A significant benefit of the Coalition's plan is that in a market where there are seven ITFS licensees each providing a single eligible program track that needs to be transitioned, four of the seven likely will be able to use after the transition MBS transmitters they are currently utilizing.

Thus, the Coalition's proposed transition plan offers the most flexible and expeditious method of migration that will result in prompt deployment of broadband services to meet commercial and educational needs.

III. UNLICENSED "UNDERLAY" RIGHTS SHOULD NOT BE ADOPTED AT THIS TIME

Sprint supports regulatory policies and practices that enhance the efficient use of spectrum. There is no evidentiary basis, however, for authorizing "underlay" operations in the 2.5 GHz band.

Specifically, the "underlay" concept must be more precisely defined by the Commission and supplemented by real-world testing of "underlay" technologies, along with collection and analysis of empirical data on the interference characteristics of the 2.5 GHz band, before the "underlay" concept can be effectively evaluated for implementation in the 2.5 GHz band, or other bands, for that matter. Further, any sanctioning of "underlay" operations must take into account the licensee's right to exclusive use of its spectrum – including the right to modify its service offerings to meet changes in business plans and the marketplace – and the right to operate free from harmful interference. Finally, unlicensed devices, by definition, have no spectrum rights with respect to licensees and thus cannot be conferred primary status in unassigned ITFS spectrum. Any changes in this approach would be a drastic reversal of precedent and harmful to consumers and licensees alike.

A. The "Underlay" Concept Must Be Defined, Evaluated, Perfected And Proven Under Real-World Conditions Before It Can Be Seriously Considered For The 2500-2690 MHz Band

Allowing unproven technologies to operate on an unlicensed - and, therefore, uncontrolled - "underlay" basis could jeopardize the legal right of licensed services to operate free from harmful interference. It is crucial, therefore, that no "underlay" authorization be adopted for the 2.5 GHz band until the general parameters of that concept have been delineated by the Commission and experimental testing has been completed and evaluated to confirm that 2.5 GHz band licensees will not be subject to harmful interference. Indeed, the Commission historically has authorized new services and technologies only after the proponents of such services or technologies have satisfactorily demonstrated that their systems would not cause interference to co-channel and adjacent channel licensees.[8]

[8] PCS, for example, was adopted only after testing under literally hundreds of experimental licenses demonstrated the technical feasibility of the proposed operations. *Amendment of Part 5 of the Commission's Rules to Revise the Experimental Radio Service Regulations*, Notice of Proposed Rulemaking, 11 FCC Rcd 20130, 20132 (1996); *Amendment of the Commission's Rules to Establish New Personal Communications Services*, Second Report and Order, 8 FCC Rcd 7700 (1993). In the broadcast context, for example, systems for inserting non-video data into the active TV

At present, there is no evidence that an "underlay" concept can be effectively implemented in the 2.5 GHz band. As the Spectrum Policy Task Force (SPTF) recently concluded, underlay operations based upon interference noise limits cannot be effectively implemented absent concise information concerning the incumbent operations, recommending that the Commission undertake a systematic study of the radiofrequency (RF) noise floor.[9] The findings of the SPTF's Unlicensed Devices and Experimental Licenses Working Group also suggest that much more data is needed before underlay operations can be effectively evaluated:

> There appears to be no available data in the United States that show what the trends have been with regard to ambient noise or data that show how much of the noise present is due to unlicensed intentional emitters or any other specific types of source. There is no generally accepted methodology for measuring ambient noise levels and format for recording such information. . . . Moreover, such data are necessary for implementing Spectrum Policy Task Force recommendations, most specifically the interference temperature recommendation.[10]

Given that the 2.5 GHz band will contain next-generation FDD and TDD systems, some of which are just entering the development and deployment stages, it will take time to compile such data. Similarly, the interference characteristics of the unlicensed devices that would operate on an "underlay" basis have not been defined, recorded or evaluated.

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transmission signal the subcarrier of a broadcaster's main signal are permitted to a non-interference basis only after submission of substantial test data and approval by the Commission. *See* 47 C.F.R. § 73.673(a)(24). More recently, MVDDS was authorized based upon testing performed under an experimental license as well as testing performed by a Commission-sanctioned independent test laboratory. *See Amendment of Parts 2 and 25 of the Commission's Rules to Permit Operation of NGSO FSS Systems Co-Frequency with GSO and Terrestrial Systems in the Ku-Band Frequency Range; Amendment of the Commission's Rules to Authorize Subsidiary Terrestrial Use of the 12.2-12.7 GHz Band by Direct Broadcast Satellite Licensees and Their Affiliates; and Applications of Broadwave USA, PDC Broadband Corporation, and Satellite Receivers, Ltd. to Provide A Fixed Service in the 12.2-12.7 GHz Band*, 17 FCC Rcd 9614 (2002). *See also*, *Cosmopolitan Enterprises*, 15 F.C.C.2d 659, 674 No. 4 (1967) ("The burden of proof is on the applicants and unless it has been shown affirmatively that either or both of the proposed antenna systems will function without the hazard of interference, the burden has not been sustained."); *New Channels Communications*, 57 R.R.2d 1600 ¶ 6 (1985).

[9] *See*, *e.g.*, SPTF Report at 33 ("The Task Force recognizes that there are hurdles that must be overcome before the interference temperature metric could serve as a useful management tool. Foremost among these is the need to acquire data on the RF noise floor for different frequency bands and geographic regions."). To that end, Sprint has suggested that the Commission should utilize the Technological Advisory Council to develop a proposed testing methodology that would be open for public comment. *See* Sprint Reply Comments in ET Docket 02-380 (May 22, 2003).

[10] Federal Communications Commission Spectrum Policy Task Force, Report of the Unlicensed Devices and Experimental Licenses Working Group, at 13, 17 (November 15, 2002).

In addition to the lack of technical information on the feasibility of the "underlay" concept, there is no evidence that the non-interference parameters of such operations can be enforced. The touchstone of the Commission's authority to authorize radiofrequency operations is that such authorizations may not cause harmful interference to licensed services.[11] As the *SPTF Report* asserted, "[e]ffective enforcement of the[] interference temperature limits is [] an essential component of [the interference temperature] concept."[12] Neither the SPTF nor the Commission, however, have examined or determined exactly how the Commission would or even could implement an effective enforcement regime covering devices that are inherently uncontrollable.[13] Controls in the form of technical operating limitations and other compliance requirements are applied to Part 15 devices at the pre-market stage - there is no effective enforcement mechanism for controlling interference from after-market unlicensed devices. Neither subscribers nor providers of licensed MDS/ITFS services will know the origination of interference they receive, as it may result from a multitude of devices transmitting at random times from random locations. As the Commission acknowledged in addressing harmful interference caused by Part 15 radar detectors to very small aperture satellite terminals (VSATs) in the 11.7-12.2 GHz band:

> [I]dentifying each individual source of interference from [these] radar detectors is not practical for [the victim service] because these devices are mobile and therefore interfere intermittently. Further, these interference sources are not under the control of the [victim service operator], so in most cases it is not possible for the [victim service operator] to remedy the interference even if the source could be identified.[14]

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[11] *See*, *e.g.*, 47 U.S.C. § 303(y)(2)(C).

[12] SPTF Report at 30.

[13] Moreover, it is not clear whether the self-controlling, interference-adaptive technology that has been theorized precisely to provide such interference control for unlicensed devices can be incorporated in a cost-effective manner.

[14] *Review of Part 15 and Other Parts of the Commission's Rules*, First Report and Order, 17 FCC Rcd 14063, 14067 ¶ 11 (2002). Further, because neither the manufacturer nor the Commission exercised control over the radar detectors that had already been marketed, the Commission's solution of modifying the radar detector rules was only applied on a prospective basis, leaving untold numbers of interference-causing devices roaming throughout the U.S.

Similarly, the *SPTF Report* recognized that once unlicensed devices enter the marketplace, "it may be difficult legally or politically to shut down their operations even if they begin to cause interference or otherwise limit the licensed user's flexibility."[15] It is essential, therefore, that the Commission resolve the myriad technical and related interference issues associated with the "underlay" concept before authorizing its use in the 2.5 GHz band.[16]

In addition, an "underlay" concept for the 2.5 GHz band cannot be effectively implemented under the Commission's current interference rules. Specifically, the Commission must adopt an objective definition of "harmful interference" that can be applied and enforced in the "underlay" concept. For its part, the SPTF has recommended that further study of this concept is essential, including review of "[q]uantitative standards reflecting real-time spectrum use" with respect to the noise levels to which victim receivers are subject.[17] The SPTF acknowledged that such underlay limits might well have to be set on a geographic basis,[18] not unlike the regional EPFD limits adopted for MVDDS transmitters. Presumably, transmissions above such limits would be deemed harmful to licensed services (whether or not these resulted in objectively identifiable service outages). That type of approach may be conceptually attractive for MVDDS transmitters because they are fixed

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[15] *SPTF Report* at 58. Part 15 interests have repeatedly sought initial authorizations to operate on an unlicensed, non-interference basis, only to subsequently claim band rights after they became entrenched in the band. *See, e.g.*, comments of various Part 15 interests in ET Docket 98-42 – which involved amending Part 18 of the Commission's rules for radio frequency (RF) lighting devices – arguing that RF lighting devices operating in the 2.4 GHz ISM band under the Part 18 rules should be subject to in-band radiated emissions limits to protect Part 15 spread spectrum devices, despite the fact that Part 18 devices in the ISM bands have long-established primary band rights.

[16] The Part 15 rules, of course, amount to an "underlay" concept and Sprint does not contend that all "underlay" concepts are unworkable. In theory, the danger of permitting Part 15 devices to operate on an unlicensed - and, thus, uncontrolled - basis is offset by establishing very low output power limits for these devices, typically well below the noise floor. Whether there is some very low power limit under which unlicensed devices could operate on such an "underlay" basis in the 2.5 GHz band that would alleviate the danger posed by their uncontrolled nature, however, has not been demonstrated.

[17] SPTF Report at 26; *see also*, Federal Communications Commission Spectrum Policy Task Force, Report of the Interference Protection Working Group, 11-12 (November 15, 2002). Even proponents of the "underlay" concept agree that "If Commission licensees are to continue to enjoy protection from 'harmful interference,' then it is in the public interest for the Commission to define the extent of that protection just as explicitly as it defines geographic exclusivity or channel assignments." Microsoft comments in ET 03-65 at 2 (July 21, 2003).

[18] *See* SPTF Report at 28.

licensed stations whose output power and transmission characteristics can be controlled and enforced by the Commission. As detailed above, however, unlicensed devices are inherently uncontrolled and may be operated anywhere. Furthermore, it is not clear whether the technology required to self-control such devices – such as self-regulating output power based upon location coordinates and/or monitoring in-band noise levels – can be realistically implemented.[19] Finally, the task of determining "harmful" interference levels will be complicated by the fact that such levels must accommodate both existing and future systems.[20]

Any "underlay" authorization that would force the customers of licensed service providers to accept additional outages to their services by an unlicensed device, or which would require licensees to attempt to modify their networks to accommodate such intrusive operations, turns the notion of having a primary service allocation on its head.[21] Both the courts and the Commission have made clear that licensees have investment expectations in the spectrum they have developed and, in many

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[19] As noted in the Office of Strategic Planning and Policy Analysis's recent Working Paper on unlicensed devices, "Because unlicensed devices derive much of their benefit from being inexpensive, small, and designed for a particular use, one could argue that including such smart technology will add significant cost, thereby reducing the attractiveness to consumers. Another perceived weakness of the smart radio model is that, in the time such a device's electronics spend looking for so-called "whitespace, " it may have to reduce its power so much or change frequencies so often, that its signal may not be detected by another nearby smart receiver." Unlicensed and Unshackled: A Joint OSP-OET White Paper on Unlicensed Devices and Their Regulatory Issues, OSP Working Paper No. 39 (May 2003) at 46. Moreover, setting geographic-based limits is impractical because, in reality, interference is highly localized in nature, which only exacerbates the difficulties in defining baseline interference levels and designing devices to ensure compliance. It is one thing to set a universal output power or field strength limit under Part 15 – it is quite another to set limits on a locality-by-locality basis.

[20] The technical parameters of a wireless network, such as link budgets and interference margins, are initially based upon the conditions that existed at the time the spectrum was acquired. As the band transitions to flexible use, licensees must be free to modify their systems to meet changes in market demand and business plans.

21 As Sprint recently commented in response to the SPTF Report with respect to its PCS operations, "Sprint paid the federal government over $3 billion for the right to use its PCS frequencies, and there is nothing in the licenses or, for that matter, the Commission's rules, specifying that Sprint must use a particular receiver sensitivity. . . . The Commission may not reasonably tell Sprint, now that it has invested over $10 billion to build its nationwide network, that it must begin using a receiver sensitivity of -96 dBm rather than -105dBm, and as a result, must redesign its network to use smaller cells." Sprint Comments in ET Docket No. 02-135, 11-12 (Jan. 27, 2003). Some CDMA technologies used in the MDS/ITFS bands operate at or below the noise floor, and the introduction of unlicensed operations would subject MDS/ITFS licensees to additional outages on a localized basis.

instances, paid for at auction.[22] As the Commission has indicated, licensees "must have certain rights and responsibilities that define and ensure their economic interests," including "the right to be protected from interference to the extent provided in the Commission's rules."[23] The burden of spectrum entry for unlicensed devices is that they must operate on a non-interference basis with respect to licensed services. Shifting that burden onto licensees - requiring licensees to accept interference from such unlicensed devices - unlawfully interferes with their legitimate investment expectations and upsets the balance of rights associated with spectrum entry.[24]

B. Unlicensed Devices Cannot Lawfully Be Conferred Primary Status In Unassigned ITFS Spectrum

Sprint opposes the *NPRM*'s suggestion that unlicensed operations be allowed on a "primary" or any other basis for unassigned ITFS spectrum.[25] As a preliminary matter, allowing unlicensed devices to operate in unassigned ITFS spectrum would upset the balance of interference protections established under the Coalition Proposal. Specifically, the technical operating parameters set forth in the Coalition Proposal were developed so that the MDS/ITFS band can be transitioned to flexible

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[22] *See, e.g., Yankee Network v. FCC*, 107 F.2d 212, 217 (D.C. Cir. 1939) (*footnotes omitted*) ("It is apparent . . . that a radio broadcasting station is valueless without a license to operate it. It is equally apparent that the granting of a license by the Commission creates a highly valuable property right, which, while limited in character, nevertheless provides the basis upon which large investments of capital are made and large commercial enterprises are conducted. As it is the purpose of the [Communications Act of 1934] to secure the use of the channels of radio communication by private licensees under a competitive system, those licensees must be protected in that use, not merely from unlicensed stations and unlicensed operators, but from . . . arbitrary action by the Commission, itself, in the exercise of its regulatory power.); by licensees must be protected in use . . . from arbitrary action by the Commission, itself, in the exercise of its regulatory power."); *see also In Re Atlantic Business and Community Development Corp*., 994 F.2d 1069, 1074 (3rd Cir. 1983); *L.B.Wilson v. FCC*, 170 F.2d 793, 798 (D.C. Cir. 1948); *Orange Park Florida v. FCC*, 811 F. 2d 664, 674 n.19 (D.C. Cir. 1987); *Reuters Ltd. V. FCC*, 781 F. 2d 946, 950 n.5 (D.C. Cir. 1986).

[23] *Principles for Promoting the Efficient Use of Spectrum by Encouraging the Development of Secondary Markets*, Policy Statement, 15 FCC Rcd 24178, 24186 (2000). The Commission added that "a transferee or lessee would have the same rights to protection against interference from operations under the experimental radio service (Part 5 of the rules, see 47 CFR 5) or from operation of unlicensed radio devices (Part 15 of the rules, see 47 CFR 15) as the primary licensee." *Id.*

[24] Not only is unlicensed device operation unencumbered by the burdens of licensee status, but such operations do not provide the same level of public benefits, such as E911.

[25] NPRM at 79-82, n. 340.

use without subjecting licensees to co-channel and/or adjacent channel interference.[26] Unlicensed devices, as explained above, are uncontrolled and their operation cannot effectively be limited to the geographic coordinates that might be associated with unassigned ITFS spectrum, posing a substantial source of interference that was not (and could not) be accounted for under the Coalition's interference rationale.

Moreover, unlicensed Part 15 devices do not operate within radio services listed in the U.S. Table of Frequency Allocations and, by definition, cannot be afforded primary spectrum rights. Primary and secondary spectrum rights are reserved for licensed services.[27] In contrast, as the Commission has stated any number of times:

> Part 15 equipment operates on a non-interference basis to licensed radio services. That is, the devices must not cause interference to licensed radio services and they must accept any interference received from licensed services. If a Part 15 device causes harmful interference to a licensed service, operation of the device must cease until the interference is corrected.[28]

In short, Part 15 operations have no "vested or recognizable right" to use a given frequency.[29] Aside from the legal prohibitions against designating primary status to unlicensed operations in the 2.5 GHz band, it is not clear that the spectrum already designated for these devices is insufficient. The ISM bands, for which 802.11 protocols are already designed, appear quite capable of

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[26] Among other things, these technical parameters may require some coordination and information sharing between system operators to mitigate interference. For example, the Coalition Proposal's provisions addressing co-channel and adjacent channel interference from licensees operating non-synchronized systems require that the licensees know the identity of each other as well as the technical characteristics of each other's systems. Such an approach is not consistent, however, with unlicensed operations.

[27] *See* 47 C.F.R. § 2.105(c).

[28] *Amendment of Part 15 of the Commission's Rules to allow certification of equipment in the 24.05 - 24.25 GHz Band At Field Strengths Up To 2500 mV/m*, Report and Order, 16 FCC Rcd 22337 (2001); *see also Amendment of Part 15 of the Commission's Rules Regarding Spread Spectrum Devices*, First Report and Order, 15 FCC Rcd. 16244, 16252 (2000) ("the most basic principle of Part 15 operations is the requirements to function in a non-interference manner in the midst of licensed devices."). As the Commission has explained, "The rules for non-licensed use of RF devices were established approximately fifty years ago. In 1938, the Commission allowed devices employing relatively low level RF signals to be operated without the need for individual licensing as long as their operation caused no harmful interference to licensed services and the devices did not generate emissions or field strength levels greater than a specified level." *Revision of Part 15 of the Rules Regarding the Operation of Radio Frequency Devices Without an Individual License*, First Report and Order, 4 FCC Rcd 3493, 3494 (1989).

[29] 47 C.F.R. § 15.5; see also *id.* at 16249.

accommodating these unlicensed operations and are more resistant to their interference because ISM devices do not suffer from in-band radiated limits. In addition, the Commission has initiated other proceedings to make spectrum available for unlicensed use in other bands.[30]

IV. THE PROPOSED AUTHORIZATION OF OPERATIONS IN THE GULF OF MEXICO THREATENS TO INTERFERE WITH SPRINT OPERATIONS IN ADJACENT AREAS.

The NPRM proposes to establish a service area in the Gulf of Mexico, in order to allow specialized businesses that operate in the Gulf region to obtain advanced communications services.[31] The concept of a Gulf of Mexico service area was first advanced in May of 1996 by the Gulf Coast MDS Service Company and later by its successor in interest, PetroCom.[32] PetroCom's proposal that the Commission authorize two licenses in the Gulf of Mexico and establish MDS-like service area in the Gulf was put out for public comment in August of 1999, and again in May of 2002 in the Gulf of Mexico MDS NPRM. In principle, commenters did not object to the establishment of a Gulf service area; however, they were concerned that operations in the region might interfere with land-based service and urged the Commission to establish mobile service rules prior to authorizing service in the Gulf. In an effort to expedite the provision of service in the Gulf, the Commission incorporated the Gulf of Mexico proceeding into the instant NPRM, proposing to create a Gulf service area and requesting comment as to how operations should be regulated if a Gulf service area were adopted .[33]

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[30] *See*, *e.g.*, *Additional Spectrum for Unlicensed Devices Below 900 MHz and in the 3 GHz Band*, Notice of Inquiry, 17 FCC Rcd 25632 (2002); *Revision of Parts 2 and 15 of the Commission's Rules to Permit Unlicensed National Information Infrastructure (U-NII) devices in the 5 GHz band*, Notice of Proposed Rulemaking, 18 FCC Rcd 11581 (2003).

[31] NPRM at ¶ 93.

[32] Petition for Rulemaking of Gulf Coast MDS Service Company (May 21, 1996); Amended Petition for Rulemaking of Petro/Com License ?Corporation (Amended Petition) (Nov. 23, 1998).

[33] *Amendment of Parts 21 and 74 of the ?Commission's Rules With Regard to Licensing in the Multipoint Distribution Service and the Instructional Television Fixed Service for the Gulf of Mexico*, 17 FCC Rcd 8446 (2002) ["Gulf NPRM"].

Sprint is concerned that activity in the Gulf region will result in interference to land-based operations. Sprint is particularly concerned that the unique propagation characteristics of signals over large bodies of water—"ducting" along the signal path-- will result in interference by Gulf operations with land-based services provided to Sprint customers. For example, Sprint's current and future MDS operations in Sarasota/Venice, Bradenton and Tampa Florida, serving far more customers than will likely be served by Gulf services, are at risk of interference by bordering Gulf operations.

The Commission must assure that any Gulf service area is subject to the existing circular protected service areas awarded to incumbent MDS and ITFS stations that are near the Gulf coastline and does not encroach upon the BTAs that were auctioned in 1996. Moreover, it must assure that the interference protection rights awarded the Gulf service area not encumber the ability of Sprint and other providers of broadband services near the coast to fully serve their authorized service areas. Therefore, Sprint urges the Commission to establish the demarcation line of the Gulf service area at the border of the PSA's or twelve nautical miles from the coastline whichever is greater, in keeping with the WCS R&O boundary definitions and as proposed by the Commission.[34]

V. THE COMMISSION SHOULD ADOPT A SUBSTANTIAL SERVICE PERFORMANCE STANDARD AND GRANDFATHER CONSTRUCTION CERTIFICATIONS AND RENEWAL APPLICATIONS FILED UNDER THE EXISTING ITFS AND MDS RULES.

Sprint agrees with the Coalition Proposal that a substantial service performance standard will be best suited for the new MDS/ITFS regulatory regime, particularly as the centerpiece to this model is likely to be flexible use within a geographic area. As the Commission explained in adopting the substantial service standard for the Wireless Communications Service:

[34] See Gulf Notice, 17 FCC Rcd at 8450 ¶ 13.

> Given the broad range of new and innovative services . . . to be provided over WCS spectrum, imposing strict construction requirements that would apply over the license term would be neither practical nor desirable as a means of meeting Section 309(j)'s objectives regarding warehousing and rapid deployment. Without knowing the specific type of service or services to be provided, it would be difficult to devise specific construction benchmarks. . . . Particularly in light of the technological uncertainties associated with use of WCS spectrum . . . , we believe that stringent build-out requirements are not warranted.[35]

The substantial service standard also is more efficient for licensees. As the Commission explained in adopting service rules for the 27 MHz band, "Compared to a construction standard, a substantial service requirement will provide licensees greater flexibility to determine how best to implement their business plans based on criteria demonstrating actual service to end users, rather than on a showing of whether a licensee passes a certain proportion of the relevant population."[36] Finally, shifting to a substantial service performance standard for MDS/ITFS also would further the Commission's goal of regulatory parity with other flexible use services, as this standard has been adopted for flexible use services.[37]

Some allowance in the Commission's performance and renewal standards must be made for the transition to a new band plan and new technologies. Specifically, because the OOBE limitations under the Coalition Proposal's transition plan may require licensees in some circumstances to utilize some of their licensed spectrum as guard bands, the Commission should clarify that such use is encompassed in the substantial service standard. In addition, Sprint agrees with the Coalition Proposal that the transition from video and first-generation broadband services to next-generation

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[35] *Amendment of the Commission's Rules to Establish Part 27, the Wireless Communications Service ("WCS")*, 12 FCC Rcd 10785, 10482 (1997).

[36] *Amendments to Parts 1, 2, 27 and 90 of the Commission's Rules to License Services in the 216-220 MHz, 1390-1395 MHz, 1427-1429 MHz, 1429-1432 MHz, 1432-1435 MHz, 1670-1675 MHz, and 2385-2390 MHz Government Transfer Bands*, 17 FCC Rcd 9980, 10010 (2002).

[37] *See Upper 700 MHz Band First R&O*, 15 FCC Rcd at 505; *Lower 700 MHz R&O*, 17 FCC Rcd at 1079; *27 MHz R&O*, 17 FCC Rcd at 10011-12. *See also Rulemaking to Amend Parts 1, 2, 21, and 25 Of The Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, to Reallocate the 29.5-30.0 GHz Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services*, 12 FCC Rcd 12545, 12659-61 (1997), *affirmed Melcher v. FCC*, 134 F.3d 1143, 1161-62 (D.C. Cir. 1998); *Amendments to Parts 1, 2, 87 and 101 of the Commission's Rules To License Fixed Services at 24 GHz*, 15 FCC Rcd 16934, 16950-52 (2000).

technologies may cause interruptions in service at a given license's renewal time. Although Sprint and many others in the industry have provided substantial service in the past, a licensee transitioning to a new technology pursuant to the rules adopted under this proceeding might not be able to demonstrate substantial service if the renewal date of the license falls relatively close to the time it transitions to the new band plan.[38] To account for this technology transition, the Commission should find that a licensee has achieved substantial service so long as it has in fact provided substantial service at some point during the effective dates of its license. The market-driven service goals of the Commission would be thwarted if licensees are encouraged to maintain old technologies simply to make their license renewal showing for fear that their planned new service offerings may not be sufficiently developed in time to meet the substantial service renewal standard. Moreover, construction certifications already filed for a given station within the BTA license should entitle the licensee to a renewal expectancy at the time of filing its next renewal. Sprint, for example, already has certified 62 of its BTA licenses and should not be required to resubmit showings of substantial service when it seeks to renew those authorizations.

Finally, the discontinuance provisions set forth at Section 21.303 of the Commission's rules[39] should be deleted or modified to account for the technology and spectrum transitions contemplated by this proceeding. Once again, the market-driven service goals of the Commission will be thwarted if licensees are effectively forced to continue the provision of obsolete services merely to preserve their authorizations. The Commission's objective of encouraging broadband will better be served by allowing licensees to discontinue these obsolete services as rapidly as possible, even if they are not ready to immediately deploy broadband technologies.

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[38]The Commission, for example, recognized this problem with respect to the transition to two-way MDS systems, concluding: "We believe that it would be inequitable to require authorization holders to follow build-out criteria applicable to rules governing wireless cable operations since many of them are now providing high-speed broadband services." FCC Public Notice, *In The Matter Of Extension Of The Five-Year Build-Out Period For BTA Authorization Holders In The Multipoint Distribution Service*, DA 01-1072, ¶ 6 (April 25, 2001).

VI. THE COMMISSION SHOULD NOT INCREASE THE ITFS PROGRAMMING OBLIGATION IMPOSED ON LICENSEES THAT LEASE EXCESS CAPACITY

The NPRM invites comment on whether or not it should increase the minimum educational programming requirement imposed upon new ITFS licensees beyond the existing five percent requirement.[40] Sprint opposes any prospective increase to the five percent minimum ITFS holdback requirement and supports the Commission in its decision not to change the programming requirements for existing leases.

Any increase in the programming requirement is unnecessary and would wreak havoc on existing leases. The Commission states that "[i]n general, we prefer to let the markets determine the outcome of such [leasing] arrangements without imposing limits, unless specific reasons justify a contrary policy."[41] Sprint supports the Commission in its preference for a free-market approach and urges it to refrain from adding restrictions and/or mandates to existing leasing arrangements. There is no reason to believe that the existing five percent holdback requirement is inadequate. The high compression rates of digital technology today (which provide excellent signal quality with compression ratios of 8:1, 10:1 or higher) enable an ITFS licensee that is able to secure digitization of its system by leasing 95% of the capacity to provide more programming using its reserved 5% than an analog ITFS licensee would be able to provide using 25%.[42] Furthermore, by increasing the holdback requirement, the Commission would reduce the amount of spectrum available for lease by ITFS licensees and thereby reduce the amount of consideration available for ITFS licensees who utilize leasing revenues to fund the production of programming and the provision of other educational and instructional services. Such a reduction can only but serve to

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[39] 47 C.F.R. § 21.303.

[40] NPRM at ¶ 116.

[41] *Id*. at ¶ 117.

[42] Commercial programming viewed by DTV customers often runs as high as 10 to 1 on a single 6MHz channel.

compromise the quality of educational services and programming made available to ITFS constituents.

Sprint has entered into several hundred leases since the 1998 adoption of the 5% holdback rule which would be adversely impacted by any change. Furthermore, changing rules mid-stream would not only penalize MDS and ITFS licensees that have acted in reliance on existing rules, but would also engender regulatory uncertainty and have a chilling effect on secondary markets in other services. Sprint urges the Commission not to change the existing holdback requirement.

VII. SPRINT OPPOSES THE PROPOSED TWO-SIDED AUCTIONS

The auction process can be an efficient mechanism for disseminating licenses into the hands of the parties that value them most and will presumably put them to fastest use. The two-sided auction process presented in the *NPRM*, however, does not appear to be an efficient mechanism for auctioning privately-held spectrum licenses, at least not under the circumstances presented in the 2.5 GHz band.

As a starting point, it is not clear that there is any need for the FCC to act as a private auctioneer. There are a variety of secondary market mechanisms already in place that allow service providers to consolidate spectrum holdings and licensees to obtain maximum value for their licenses at the time and under the terms of their choosing. Indeed, most of the MDS/ITFS spectrum already has been consolidated through secondary market mechanisms and there is no indication that an FCC-conducted auction could reach a more efficient outcome. As one of the largest participants in the MDS/ITFS secondary market, Sprint is confident that, notwithstanding the transaction costs associated with private transactions, the private marketplace can more efficiently and effectively accommodate whatever further consolidation of spectrum interests may be appropriate for the 2.5 GHz band. As the Commission concluded in declining to conduct a secondary auction in the 700

MHz band proceeding, "[the Commission] cannot know whether individually negotiated arrangements or private auctions will be the more effective voluntary [spectrum] clearing mechanism and support giving parties a choice, so long as the approach is consistent with Commission policies."[43] The Commission's rationale is equally applicable to ITFS and MDS spectrum.

An FCC two-sided auction is an inefficient mechanism for disseminating MDS/ITFS licenses, as it imposes significant transaction costs on participants. First, any FCC-conducted auction likely would require many months to establish and, because of the novel issues involved, the adoption of auction-specific rules could be delayed for many additional months through legal challenges. In addition, during the relevant auction periods, the Commission's anti-collusion rules could prevent applicants from entering into the channel swaps and other secondary market activities that would facilitate the transition to the new ITFS/MDS band plan, which is the ultimate goal of this proceeding.

Further, as the *NPRM* notes, most of the ITFS spectrum is the subject of Commission-approved lease agreements, many of which contain provisions (such as rights of first refusal in the event of a sale or absolute prohibitions on assignment absent prior consent of the lessee to the proposed assignee) that would effectively preclude the licensee from entering into any two-sided auction. As OPP Working Paper No. 38 recognizes, any restructuring auction must have significant licensee participation, and participation in any MDS/ITFS restructuring auction would be inconsistent with many existing lease-defined legal relationships. At a time when the Commission is seeking to promote secondary market activities for a wide variety of services, the Commission

[43] *Review of the Commission's Rules and Policies Affecting the Conversion to Digital Television*, Third Report and Order, 16 FCC Rcd 2703, 2721 (2001). As the Commission further concluded, "the private sector is better suited to determine what mechanisms interested parties might demand and to implement a secondary auction in a manner that is most responsive to [incumbent licensees'] and potential bidders' needs." *Id.* at 2720.

cannot, and should not, be taking any action here to promote two-sided auctions that would undermine the leasing arrangements between licensees and system operators.

VIII. SPRINT FAVORS OPEN ELIGIBILITY AND DOES NOT SUPPORT CROSS-OWNERSHIP RESTRICTIONS

In the NPRM, the Commission states that "Under our precedent, eligibility restrictions should be imposed only when (1) there is a significant likelihood of substantial competitive harm in specific markets, and (2) when eligibility restrictions are an effective way to address such harm."[44] Sprint supports this Commission precedent and urges the Commission to refrain from adopting cross-ownership or other restrictions on the eligibility of cable system operators, local exchange carriers ("LECs") or CMRS providers to hold rights to MDS/ITFS Spectrum beyond those currently mandated by Section 613(a) of the Act.

It can hardly be argued that cross-ownership of cable, LEC, or CMRS with MDS/ITFS spectrum poses either a significant likelihood of substantial competitive harm in specific markets or that eligibility restrictions would effectively address such harm. Because licensees under the new regulatory regime would have the flexibility to provide any fixed or mobile service in any market, it is not possible to predict how the MDS/ITFS spectrum will be used, much less whether such future use might cause *substantial* harm in a *specific* market. As stated earlier, the evolution of service in the 2.5 GHz band is progressing quickly and promises improved simplicity, portability, reliability and data rates surpassing offerings by either MDS, cable modem or DSL providers today.

Sprint submits that, should the Commission in the future find that an individual provider is somehow using MDS/ITFS spectrum improperly, it may restrict or reject future assignments and

[44] NPRM at ¶ 119, citing *39 GHz Report and Order*, 12 FCC Rcd at 18637.

transfers of licenses under Section 310 of the Communications Act.[45] Such an approach would be in keeping with the market-oriented regulation that the Commission has stated it favors.

IX. LICENSEES SHOULD BE PERMITTED TO SELL AND/OR LEASE THEIR SPECTRUM AT THEIR SOLE DISCRETION

Sprint applauds the Commission's continued support for ITFS educational services in the 2.5 GHz band. Through leases with hundreds of ITFS licensees across over 90 markets, Sprint has entered into relationships that provide institutions ranging in size from small K-12 schools to State universities with operational support, equipment, tower site maintenance and access, receive sites, and lease payments. The consideration provided by Sprint, as negotiated by the ITFS licensee, supports the particular educational mission of the ITFS licensee and the specific educational and instructional needs identified by respective ITFS licensee. Recognizing that each licensee's needs will be different, the Commission has given ITFS licensees broad flexibility to negotiate capacity leases that meet their particular needs. In furtherance of that policy, Sprint now urges the Commission to adopt the proposal in the NPRM and permit ITFS licensees, in their sole discretion, to assign or lease their licenses in whole or in part to commercial system operators.

In Sprint's experience, ITFS leases take a wide variety of forms, depending on the ITFS institution's needs at the time. For example, in some leases the licensees negotiated for heavily weighted up-front consideration, some demanded consideration paid over time, some desired a mix of monthly minimum payments with a revenue share, some had fixed payments, etc. Sprint continues to support retention of ITFS spectrum in the 2.5 GHz band, and is not suggesting that ITFS licensees be forcibly divested of any spectrum. However, Sprint also supports affording ITFS

[45] *See, e.g., Rulemaking to Amend Parts 1, 2, 21 and 25 of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, to Reallocate the 29.5-30-0 GHz Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services*, 13 FCC Rcd 4856, 4906-7 (1998) (stating that Commission's Rules relating to assignment and transfer of LMDS licenses provide "an effective tool to ensure that proposed license acquisitions by incumbent LECs will not, in particular cases, be inconsistent with the pro-competitive policies that guide our licensing of LMDS").

licensees the flexibility, at their sole discretion, to sell and/or lease their spectrum to a commercial licensee if they determine that such a sale will best meet the educational and instructional needs of their local community. Not only will such an approach benefit local education but, as the Commission stated in the Spectrum Policy Statement in 2000 and repeats in the NPRM, "if market forces are allowed to operate without being restricted by government, they will tend to push the use of [radio] licenses to their highest valued applications."[46] The Commission's recent decision authorizing the leasing of spectrum by cellular, PCS, Specialized Mobile Radios (SMR), Local Multipoint Distribution Service (LMDS), fixed microwave, 24 GHz, 39 GHz, etc., underscores the Commission's general appreciation of the importance of a licensees' ability to freely lease or transfer its rights to Spectrum.[47] It is clear that some ITFS licensees have no desire to sell ITFS spectrum to commercial entities, and thus adoption of this proposal poses no threat to the continued existence of ITFS. However, others may desire to realize the value of their assets to support their institution's educational needs, and maximization of that value can only be achieved if licenses can be assigned to commercial system operators.

Sprint would certainly be interested in acquiring such licenses. Affording Sprint the ability to acquire licenses for ITFS spectrum will provide comfort to its investors, financiers and shareholders and will further the advancement of next generation services over the 2.5 GHz band. Construction of a 2.5 GHz band infrastructure will not be inexpensive, and removing the long-term uncertainties associated with spectrum leases cannot help but promote system deployment.

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[46] NPRM at ¶ 111, quoting Principles for Promoting the Efficient Use of Spectrum by Encouraging the Development of Secondary Markets, 15 FCC Rcd 24, 178 (2000).

[47] Promoting efficient use of the spectrum through elimination of barriers to the development of secondary markets; Report and Order and Further Notice of Proposed Rulemaking; WT Docket No. 00-230 (adopted May 13, 2003).

X. CONCLUSION

Sprint supports the Commission in its effort to revise the rules and policies governing the licensing of ITFS, MDS and MMDS services in the 2500-2690 MHz band. The existing rules are out-of-date and hinder the efficient and innovative development of services in the band which the Commission strives to promote. Sprint supports the revisions proposed by the Coalition Proposal and is hopeful that the Commission will expeditiously implement the changes proposed so that the path towards migration and deployment of new services is clearly defined and can be immediately taken.

Respectfully submitted,

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