

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

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

REPLY COMMENTS OF SPRINT CORPORATION

Luisa L. Lancetti
Vice President, Wireless Regulatory Affairs
David Munson
Attorney
Sprint Corporation
401 9th St. NW, Suite 400
Washington, DC 20004
(202) 585-1923

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REPLY COMMENTS OF SPRINT CORPORATION

Sprint Corporation (Sprint) submits these reply comments in response to the Commission's Notice of Proposed Rule Making and Memorandum Opinion and Order proposing changes to the Instructional Television Fixed Service (ITFS) and the Multipoint Distribution Service (MDS) service rules and spectrum assignments.¹

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").

I. INTRODUCTION AND SUMMARY

As a leading provider of broadband wireless data systems and multichannel video programming in the 2150-2162 MHz and 2500-2690 MHz bands (the “MDS/ITFS band”), Sprint submits that there is a bright future for this spectrum to provide the kinds of second-, third-, and next-generation broadband services that the American public has come to expect. Indeed, the promise of making efficient use of the MDS/ITFS band led Sprint and a broad coalition of major system operators, MDS and ITFS licensees, equipment manufacturers, engineering experts and other interested parties, working with the Wireless Communications Association International, Inc. (WCA), the National ITFS Association (NIA) and the Catholic Television Network (CTN) (collectively, the “Coalition”), to develop a Coalition Proposal to reform the MDS/ITFS band.² The Coalition Proposal provides a new regulatory and spectral framework that permits the most efficient and effective use of the MDS/ITFS spectrum, while accommodating the needs of incumbents and maximizing options to deploy whatever technologies may emerge as the best technologies to provide the kinds of broadband services that the market demands.

As explained below, while recommendations made by the Coalition enjoy broad support in the record, many commenters suggest alternative bandplans and transition plans that do not provide equivalent flexibility, spectral efficiency, or accommodation of incumbents and, therefore, should be rejected. Specifically, bandplans suggested by

² “A Proposal for Revising the MDS and ITFS Regulatory Regime,” Wireless Communications Ass’n Int’l, Nat’l ITFS Ass’n and Catholic Television Network, RM-10586 (filed Oct. 7, 2002) (“Coalition Proposal”). WCA, NIA and CTN subsequently filed supplements to the original proposal. *See* First Supplement To ‘A Proposal For Revising The MDS And ITFS Regulatory Regime,’ RM-10586 (filed Nov. 14, 2002); Second Supplement To ‘A Proposal For Revising The MDS And ITFS Regulatory Regime,’ RM-10586 (filed Feb. 7, 2003).

certain commenters effectively lock in technology choices and, in the case of spectrum-splitting proposals, may not provide enough spectrum to pursue preferred technologies. Unlike some proposals, the Coalition Proposal also accommodates high-power ITFS and commercial operations in a middle band segment and provides reasonable mechanisms to minimize disruption to existing commercial high-power operators. In contrast to the Coalition's market-by-market transition plan, which offers the most flexible and expeditious method of migrating to a new bandplan, the date-certain transition plans espoused by various commenters are arbitrary, divert limited resources from markets that are ripe for deployment of broadband services, and encourage greenmail. Finally, the record clearly does not support authorization of unlicensed operations on an "underlay" basis in the MDS/ITFS band.

It seems clear from various comments that the use of two-sided auctions is not an efficient mechanism to disseminate MDS and ITFS licenses due to the unique circumstances of the MDS/ITFS band. In particular, most if not all of the MDS and ITFS licenses at issue are bound by existing lease agreements, which potentially could complicate the auction process and delay the transitioning of the MDS/ITFS band. With respect to leases, there is no valid justification for terminating or clarifying existing leases for high-power spectrum, as suggested by at least one commenter. The Commission should also reject the suggestions by some commenters to impose restrictions on cross-ownership of MDS/ITFS spectrum by cable operators/franchisees, local exchange carriers and/or commercial mobile radio service providers. There is no evidence that anti-competitive harms will arise in the absence of such restriction and there are alternative legal mechanisms to address these issues should they arise.

Sprint agrees with various commenters regarding the importance of the educational services provided by ITFS licensees. In Sprint's view, removing ITFS eligibility restrictions and allowing ITFS licensees to sell and/or lease some or all of their spectrum at their sole discretion would further enable ITFS licensees to pursue their important educational missions. In addition, there is no technical or operational justification for the suggestion made by one commenter to limit fixed, mobile and portable customer premises equipment response stations to a 2-watts EIRP power limit. Finally, the record does not support moving forward with the Commission's proposal to establish MDS service in the Gulf region, but if the Commission elects to pursue that proposal, it should observe the recommendations of Sprint and the WCA.

II. THE COALITION BANDPLAN AND TRANSITION PLAN MAXIMIZE FLEXIBILITY

As one of the largest licensees and active operators of MDS/ITFS spectrum, with more constructed Multichannel Multipoint Distribution Service video and data networks than any other company, Sprint can attest from substantial real-world experience that MDS/ITFS operators require a new regulatory regime and bandplan that provide flexibility to meet market demand. This fundamental requirement for flexibility is acknowledged by virtually every commenting party to this proceeding. The Coalition bandplan and transition plan maximize this flexibility by, among other means:

- Allowing operators 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;
- Minimizing the potential for interference when non-synchronized technologies operate on a co-channel basis in neighboring markets or operate on an adjacent channel basis in the same market;
- Reasonably accommodating existing high-power broadcast services;
- Providing a market-by-market transition so that broadband services can be deployed in accordance with market demand; and

- Providing the funding for rechannelization of ITFS licensees so they can continue to broadcast their educational programming.

The record demonstrates broad support for the Coalition bandplan among licensees, operators, MDS/ITFS associations, equipment manufacturers and other interested parties.³

In contrast to the Coalition's carefully crafted proposal, the alternative re-banding and transition ideas suggested by various commenters merely promote their own technologies (TDD or FDD) and neither provide flexibility to meet changing market demands nor comport with the reality of the existing marketplace.

A. Technology-Centric Re-banding Proposals Are Inflexible And Should Be Rejected

Among the guiding principles of this proceeding is that the new bandplan and service rules for the MDS/ITFS band must be flexible enough to accommodate the emerging technologies and services that the market eventually will dictate.⁴ Bandplans suggested by certain commenters that assign spectrum based upon technology choices do not achieve this purpose. Fixed Wireless Holdings LLC (FWH), for example, suggests a three-segment bandplan that devotes half of the MDS/ITFS spectrum to FDD operations (which would be forced to operate in the lower and upper band segments) and the other half of the MDS/ITFS spectrum to TDD operations (which would be forced to operate in

³ See, e.g., Comments of the Archdiocese of Los Angeles at 1; Comments of the Archdiocese of New York at 1; Comments of the Diocese of Brooklyn at 1; Comments of the School Board of Broward County at 13; Comments of the School Board of Miami-Dade County, Florida at 1-2; Comments of the South Carolina Educational Television Commission at 5-6; Comments of BellSouth Corporation and BellSouth Wireless Cable, Inc. at i; Comments of W.A.T.C.H. TV Company at 5; Comments of the Information Technology Industry Council at 5; Joint Comments of the ITFS Parties at 2-3; Comments of ComSpec Corporation at 2; Comments of EarthLink, Inc. at 4-9; Comments of Hardin and Associates, Inc. at 1-6; Comments of Intel Corporation at 3; Comments of IPWireless, Inc. at 3; Comments of Lucent Technologies at 4; Comments of the Hispanic Information and Telecommunications Networks, Inc. at 8-9.

⁴ See, e.g., *NPRM* at ¶¶ 36-43.

the middle band segment).⁵ Unlike the Coalition Proposal, FWH's approach locks in technology choices made at the time of licensing. The static technology segmentation of the FWH approach does not allow for the separate evolution of FDD or TDD technology over time and the real possibility that one technology may emerge as truly dominant and in need of greater spectrum, or that one may grow more spectrally efficient and require less spectrum.⁶ FWH contends that the segregation of FDD and TDD systems is necessary to prevent co-channel interference, yet fails to acknowledge the numerous mitigation measures outlined in the Coalition Proposal and supplements thereto⁷ – measures that address the issue without requiring the entire band to be redrawn. Moreover, all high-site, high-power operations under FWH's alternative re-banding

⁵ NextNet Wireless, Inc. suggests basically the same bandplan as FWH and is objectionable on identical grounds. See Comments of NextNet Wireless, Inc. at 4.

⁶ As support for its proposal to establish discrete spectrum blocks for FDD and TDD operations, FWH points to the Commission's bandplan for the lower 700 MHz proceeding, contending that the lower 700 MHz bandplan "provided for both paired spectrum blocks suitable for FDD operations and unpaired spectrum blocks suitable for TDD operations." Comments of FWH at 5. In fact, while the Commission adopted both paired and unpaired spectrum blocks, it did not restrict TDD (or FDD) operations to either the paired or unpaired spectrum blocks, as FWH proposes. See *Reallocation and Service Rules for the 698-746 MHz Spectrum Band (Television Channels 52-59)*, 17 FCC Rcd 1022, 1052-57 (2002). This decision was consistent with the Commission's earlier bandplan decisions for the upper 700 MHz band reallocation, which facilitated TDD-based technologies to use "either the upper or [] lower bands, or both." See *Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission's Rules*, WT Docket No. 99-168, Memorandum Opinion and Order and Further Notice of Proposed Rulemaking, 15 FCC Rcd 20845, 20851 ¶ 10 (2000).

⁷ See "A Proposal For Revising The MDS and ITFS Regulatory Regime," Wireless Communications Ass'n Int'l, Nat'l ITFS Ass'n and Catholic Television Network, RM-10586 (filed Oct. 7, 2002) at 28 ("Coalition Proposal") (such measures include adding transmission beam tilts, modifying antenna orientation, coordinating frequency reuse patterns, etc.). The Coalition subsequently requested that the Commission adopt additional interference protection requirements to address situations of co-channel interference between non-synchronized technologies. See First Supplement To "A Proposal For Revising The MDS And ITFS Regulatory Regime," RM-10586 (filed Nov. 14, 2002) at 4 (refining the proposal to utilize a field strength limit of 47 dBuV/m measured 1.5 meters above ground); Second Supplement To "A Proposal For Revising The MDS And ITFS Regulatory Regime," RM-10586 (filed Feb. 7, 2003) at 4 (proposing safe-harbor heights for base station transmit and receive antennas). More generally, although some degree of guard band separation may be required to facilitate co-deployment of FDD and TDD systems under the Coalition Proposal – even with the Coalition's dual out-of-band emissions (OOBE) mask and other mechanisms addressing interference between proximate deployments of non-synchronized systems – channel group licensees should have adequate spectrum given their initial 16.5 MHz of contiguous spectrum and the ability to consolidate additional contiguous spectrum through secondary market mechanisms.

approach would be discontinued – at the high-power licensees’ costs. FWH’s inflexible re-banding approach not only would pull the plug on well over one thousand high-power operations that serve legitimate and important educational and community functions, but has little support in the record.⁸ Technology-specific bandplans suggested by other commenters share similar deficiencies.⁹

Although not expressly contingent upon technology choices, the bandplan of ArrayComm, Inc. (ArrayComm) ultimately yields the same objectionable results as technology-specific proposals. ArrayComm suggests a three-segment bandplan with a middle segment set aside for high-site, high-power operations, but would assign spectrum in the remaining segments on a paired or unpaired basis, with paired channel assignments starting at one end of the band segment and unpaired channel assignments starting at the opposite end of the segment. Although the bandplan does not make channel assignments contingent upon FDD and TDD choices, it is expressly intended to segregate FDD and TDD operations¹⁰ and does not achieve the flexibility or order of the Coalition Proposal. First, the ArrayComm plan effectively requires licensees to choose a specific technology up front, and locks in that technology choice for all time since it requires a *de facto* guard

⁸ Further, FWH’s assertion that the Coalition’s bandplan “reserves” the middle band segment for high-power systems is misleading. *See* Comments of FWH at n.13. Specifically, while the Coalition bandplan restricts high-power operations to the middle band segment (to provide interference protection to the low-power operations in the lower and upper band segments), it also allows the middle band segment channels to be used for downstream data transmission in a low-power FDD system.

⁹ The bandplan suggest by Dallas MDS Partners, for example, de-interleaves only the E and F blocks for new broadband services, and thus provides only 48 MHz of spectrum that is necessarily limited to TDD technologies. *See* Comments of Dallas MDS Partners at 4-5. In contrast, the Coalition bandplan provides 132 MHz of spectrum for second-, third- and next-generation services that can be deployed using both FDD and TDD technologies. Moreover, it is clear that maximizing the flexibility of the MDS/ITFS band to accommodate FDD and TDD technologies, while simultaneously accommodating high-power ITFS operations, requires a bandplan that encompasses the entire 2500-2690 MHz bandwidth. In any event, it is telling that the major holders of E and F spectrum fully support the Coalition Proposal. *See, e.g.*, Comments of BellSouth Corporation and BellSouth Wireless Cable; Comments of the Coalition; Comments of Sprint Corporation.

band of “unassigned” spectrum to provide interference protection between the paired (FDD) and unpaired (TDD) operations.¹¹ Like the FWH plan, the ArrayComm plan does not allow technology to evolve. Indeed, licensees may feel compelled to choose an unpaired spectrum assignment and deploy a TDD system if, as is likely to be the case, FDD technology for the MDS/ITFS band is not commercially available at the time the new bandplan takes effect and licensees are required to make their spectrum choice.

Second, the plan’s assumption (and requirement) that there be unassigned spectrum between the paired (FDD) and unpaired (TDD) spectrum assignments to provide interference protection between the FDD and TDD operations is unworkable in markets in which all the spectrum is licensed.¹² For example, if one half of the channel group licensees choose paired spectrum assignments and the remaining half of the licensees choose unpaired spectrum assignments, such that all spectrum in the upper and lower band segments is accounted for, there will not be any *de facto* guard band. In this case, the last licensee to choose an unpaired spectrum assignment must be adjacent to the last two licensees to choose unpaired spectrum assignments.¹³ Assuming that the licensee choosing the unpaired spectrum assignment wanted to deploy an FDD technology and the licensees of the unpaired spectrum assignments wanted to deploy TDD technologies, the

¹⁰ See Comments of ArrayComm at 6.

¹¹ While ArrayComm asserts that licensees may operate FDD systems on unpaired channels and TDD systems on paired channels, the rationale for its proposal to separate unpaired from paired channels is to minimize potential problems of co-existence between FDD and TDD systems. See Comments of ArrayComm at 5-6.

¹² Further, where the unpaired and paired assignments meet directly in the middle of the band segment, the paired spectrum licensee’s flexibility is diminished in that it must devote some of its spectrum to guard band duty, but has only one-half of its total spectrum to work with (the other half being in the other band segment).

¹³ Specifically, the paired spectrum licensee’s paired channel in the lower (or upper) band segment will be adjacent to the penultimate unpaired spectrum assignments, and its paired channel in the upper (or lower) band segment will be adjacent to the ultimate unpaired spectrum assignment.

licensee of the paired spectrum assignment would have to use some portion of its 8.25 MHz channels in each of the upper and lower band segments as a guard band to protect against the adjacent TDD operations, which potentially could leave the licensee with insufficient spectrum to pursue FDD operations.

The ArrayComm bandplan potentially could dictate deployment in other ways. Given that there is an equivalent amount of spectrum in the upper and lower band segments, for each assignment of unpaired spectrum in the upper (or lower) band segment, there must be an equivalent assignment of unpaired spectrum in the spectrum in the lower (or upper) band segment. Thus, for example, if the first licensee to choose an assignment (*e.g.*, the licensee for channel group A) opts for an unpaired assignment and the next six licensees (*e.g.*, the licensees for channel groups B through G) opt for paired assignments, the last licensee in the queue to choose a spectrum assignment (the licensee(s) for the H licenses) gets no choice at all, but rather is stuck with an unpaired assignment (and would be forced to deploy a TDD system) – specifically, the chunk of unpaired spectrum that was left when all other spectrum was accounted for by the previous licensees.¹⁴ Again, licensee options are dictated by the arbitrary process of the bandplan’s assignment mechanism, rather than market demand.

Perhaps the most problematic aspect of the arbitrary channel reassignments that would occur under the ArrayComm bandplan (and others) is that it can result in drastically new adjacent channel and co-channel relationships among licensee stations that have not changed their physical locations. For example, if the channel group A licensee in Washington, D.C. elects to deploy an FDD system on paired channels –

¹⁴ Similarly, if the first licensee chooses an unpaired assignment and the next six licensees opt for unpaired spectrum, the last licensee must take a paired assignment.

receiving the 2500-2508.25 MHz channel in the lower band segment and the 2620-2628.25 MHz channel in the upper band segment – and (i) all licensees in the Baltimore, MD, market elect unpaired spectrum assignments to deploy TDD systems, such that the H licensees are assigned to the 2620-2636.5 MHz band, and (ii) the H group licenses were not utilized in the Washington market prior to the transition (such that the H group licensees in Baltimore did not previously have a neighboring PSA in Washington to contend with), the GSA of H group licensees in Baltimore will end up overlapping with the GSA of the channel group A licensee in Washington, creating a “no-man’s” land in which customers will not be servable by either the channel A or channel H licensees. The Coalition bandplan avoids this problem by maintaining the existing co-channel relationships – *i.e.*, the channel group A (and B through H) licensee is always co-channel to the channel group A (and B through H) licensee in its neighboring markets.

Finally, the Commission should reject the suggestion of Motorola, Inc., that it base the new MDS/ITFS bandplan upon one of the International Mobile Telecommunications-2000 (IMT-2000) bandplan scenarios now under consideration by Working Party (WP) 8F of the International Telecommunications Union (ITU).¹⁵ The deliberations of WP 8F have been ongoing for some time and several more years will be required to implement whatever recommendations that working group eventually adopts. MDS and ITFS operators do not have time to wait for the ITU to make a decision on that issue, let alone implement such decision. In any event, the Coalition bandplan is flexible enough to accommodate IMT-2000 services. Indeed, the current working document prepared by WP 8F – Recommendation ITU-R M.1036-1 – cautions that spectrum

¹⁵ See Comments of Motorola, Inc. at 9. See also Comments of Nokia, Inc. at 1.

assignments should be available “for use in either FDD mode, TDD mode, or both, and should not, ideally, be segmented between FDD and TDD modes in paired spectrum” to preserve flexibility of deployment.¹⁶ Most importantly, however, none of the IMT-2000 bandplan scenarios currently under consideration by WP 8F allow for high-site, high-power ITFS operations.

B. Spectrum-Splitting Proposals Do Not Reflect The Realities Of The ITFS Marketplace And Are Inefficient

As a starting point to any re-banding approach, it seems likely that most if not all incumbent ITFS licensees that are intent on using all of their licensed spectrum for educational purposes are likely to favor a single contiguous block of spectrum to support TDD systems.¹⁷ The Coalition bandplan accommodates these entities by providing licensees with a contiguous 16.5 MHz channel. Licensees that elect to pursue FDD systems can obtain paired spectrum in the upper/lower band through a wide range of secondary market mechanisms, and should be able to obtain such paired channel in a single transaction. Bandplans that split the licensee’s spectrum on both sides of the middle band segment, such as the bandplan suggested by Grand Wireless Company, Inc. – Michigan (Grand Wireless), would force the ITFS licensees to incur transaction costs to combine their spectrum allotment into a contiguous channel – costs that they are ill-positioned to absorb and would not face under the Coalition bandplan.

In addition, spectrum-splitting bandplans are inefficient. The Grand Wireless bandplan, for example, would unevenly split licensees’ channels between an upper and

¹⁶ Draft Revision of Recommendation ITU-R M.1036-1, “Frequency arrangements for implementation of the terrestrial component of International Mobile Telecommunications-2000 (IMT-2000) in the bands 806-960 MHz, 1 710-2 025 MHz, 2 110-2 200 MHz and 2 500-2 690 MHz,” Radiocommunication Study Group 8, Document 8/1023-E (Feb. 28, 2003) at 10, Section 6.3.

¹⁷ See, e.g., Comments of School Board of Broward County at 11.

lower band segment in an 11 MHz/5.5 MHz (and reverse order) pairing, thus, providing less spectrum to licensees that wish to pursue TDD technology and potentially not enough paired spectrum for FDD operations.¹⁸ Specifically, the limited size of the channels – 11 MHz and 5.5 MHz – creates problems if the licensees’ adjacent channel neighbors are utilizing non-synchronized technologies. In such instances, the guard bands that the licensee could be required to implement to co-exist with its non-synchronized adjacent channel neighbor could render most of its channel unusable.¹⁹ Further, the plan arbitrarily alternates the pairing order – Channel Groups A, C, E and G get 11 MHz (channels 1 and 2) in the lower band segment and 5.5 MHz (channel 3) in the upper band segment while Channel Groups B, D, and F get 5.5 MHz (channel 1) in the lower band segment and 11 MHz (channels 2 and 3) in the upper band segment.²⁰ Because the FDD downstream operations are limited to the upper band segment, this pairing could provide an undue advantage for the channel group B, D and F licensees in that upstream data operations typically require significantly less spectrum than downstream data operations.²¹

¹⁸ See Comments of Grand Wireless at 5. A similar plan was espoused by PACE Telecommunications Consortium of Michigan (PACE) and is objectionable on identical grounds to those identified with respect to the Grand Wireless plan. See Comments of PACE at 4-5.

¹⁹ The Coalition Proposal, for example, establishes an OOB limit of $67 + 10 \log(P)$ dB measured 3 MHz beyond the edge of the adjacent channel block when non-synchronized technologies are deployed in the same area, effective upon request of an affected licensee. As applied to a 5.5 MHz channel under the Grand Wireless plan, such OOB limit could require the 5.5 MHz channel licensee to absorb some interference throughout its entire channel.

²⁰ See Comments of Grand Wireless at 5. Each channel group licensee, A through H, would receive a 5.5 MHz channel in the middle band segment.

²¹ Moreover, the channel group H licensee only receives one 5.5 MHz channel in each band segment, the rationale for which is not explained in Grand Wireless’ comments.

C. The Coalition Bandplan Accommodates Rural Licensees That Operate High-Site, High-Power Stations

Some rural high-power multi-channel video programming distribution (MPVD) operators, such as Adams Telcom, Inc., Central Texas Communications, Inc. and Leaco Rural Telephone Cooperative, Inc. (collectively, the “Rural Commenters”), assert that their operations could be unduly impacted by the Coalition bandplan and transition plan, ostensibly because serving their subscriber bases using low power network configurations would be cost-prohibitive.²² As a starting point, the Coalition Proposal provides ample spectrum for high-power video operations in the middle band segment, and MPVD operators presumably will be able to aggregate most of this spectrum in markets they serve through various secondary market mechanisms.

With respect to the Rural Commenters’ concern that licensees “150 miles away could force the Rural Commenters and other rural wireless video providers into a new band plan at any time . . . ,”²³ the Coalition Proposal also includes an opt-out provision for high-power operators serving a mere five percent of their area’s population.²⁴ Accordingly, many high-power operators will be eligible to decline transition by a Proponent altogether. Moreover, as a practical matter, it is unlikely that many of these rural MPVD operators will be located in close enough geographic proximity to another license area targeted by a Proponent such that transitioning would be necessary to overcome interference problems created by their neighboring high-power systems.

²² See Comments of the Rural Commenters at 5. See also Comments of Teton Wireless Television, Inc. at 10.

²³ Comments of the Rural Commenters at 6.

²⁴ See Coalition Proposal, Appendix B at 17.

In any event, for such remotely located operators, methods short of digitalization will be available to attenuate any interference that these high-power, high-site operations might otherwise cause to base stations in neighboring service areas. Such methods may simply involve down-tilting the transmission beam or lowering the height of the transmission antenna to ensure that the high-power analog signals do not extend outside the MVPD operator's GSA. Finally, it must be acknowledged that the whole point of establishing a middle band segment for high-site, high-power ITFS and commercial operations is to make possible the provision of broadband services over low-power cellular systems in rest of the MDS/ITFS band. If the MDS/ITFS band is to evolve into new technologies and services, it cannot be held hostage to static technologies that serve a smattering of the population. Indeed, Sprint is one of the largest, if not the largest, distributors of multichannel video programming using MDS/ITFS channels in the U.S. and would not itself be eligible for the 5 percent opt-out in virtually any of its markets, yet fully supports the Coalition's Proposal because it represents the most complete and structured approach for making efficient and market-oriented use of the MDS/ITFS band.

D. The Coalition Transition Plan Offers The Flexibility To Convert Markets In Accordance With Market Demand

As Sprint explained in its comments, the Coalition's market-by-market transition plan offers the most flexible and expeditious method of migrating to a new bandplan, and will permit prompt deployment of broadband services according to the dictates of market demand. Sprint has performed extensive analysis of the Coalition transition plan, analyzing its impact upon affected operators and licensees, and has concluded that it is a fair, manageable and efficient process that will effect the conversion of the MDS/ITFS

band into a bandplan that can accommodate next-generation broadband services while keeping incumbent ITFS education services intact. The Coalition transition plan not only provides funding for ITFS licensee's rechannelization, but is straightforward in application.

Date-certain transition plans, as espoused by various commenters, do not simplify the transition process and do not provide the flexibility required to achieve the goals of this proceeding.²⁵ As a fundamental matter, the date of transition should be dictated by market demand, rather than some arbitrary date. Mandating transition to the new bandplan in a market for which there is no demand only diverts limited capital and human resources from operators' efforts to transition and build out markets in which both the nature of the service to be provided and the level of demand for that service have matured.²⁶ Such requirement could also unnecessarily trigger the conversion of high-power stations, which might otherwise be able to operate indefinitely.²⁷ Further, date-certain transition plans encourage greenmail and hold-outs against transitioning until the last minute.²⁸ At the extreme, the ability to hold-out could unreasonably delay the

²⁵ Stanford University and Northeastern University, for example, contend that the Commission should not require mandatory transition until seven years after adoption of the new rules. *See* Joint Comments of Stanford University and Northeastern University at 18. Spectrum Market, LLC suggests mandatory transitions by January 2008. *See* Comments of Spectrum Market, LLC at 7. *See also* Comments of Grand MMDS Alliance at 8 (mandatory transition within two to five years); Comments of Illinois Institute of Technology at 23 (mandatory transition within five years).

²⁶ Grand Wireless, for example, suggests mandatory transition within 15 months of the adoption of new rules, which clearly has no relation to the purposes of this proceeding when you consider that most FDD equipment for the MDS/ITFS band is still in the design and developmental stages and may not be commercially available within that time frame. *See* Grand Wireless Comments at 10.

²⁷ The Coalition's transition plan allows rural MVPDs to operate as they always have, provided that their operations do not interfere with low-power cellular systems.

²⁸ Intel Corporation's contention that the Coalition transition plan will lead to "prolonged uncertain transition" that could "increase the risk of investments" is misplaced in the market-based context of MDS/ITFS services. Comments of Intel Corporation at 7. In fact, markets which have been identified as having demand for new MDS/ITFS broadband services will be more attractive for transitioning from an

deployment of broadband services for many years. The Rural Commenters, for example, contend that the Commission should not require mandatory transition until December 31, 2012, which would inject a potential 9-year delay in achieving the goals of this proceeding.²⁹

Contentions that the Coalition transition plan will result in “daisy chains” of market transitions are erroneous. Spectrum Market, LLC (SML) contends, for example, that the Coalition transition plan is “likely impossible of accomplishment,” apparently based upon the notion that a transition of one GSA necessarily requires the transition of each and every overlapping GSA with respect to it, each and every GSA that overlaps such overlapping GSA, and each and every GSA that might overlap a GSA affected by the initial transition.³⁰ The Coalition transition plan, however, only requires the transitioning of (i) licensees that have not previously been transitioned and that have a TIA that overlaps the initial GSA to be transitioned, (ii) non-transitioned licensees with a TIA to which any of the initially transitioned GSA's transmission antennas have an unobstructed transmission path, and (iii) non-transitioned licensees having a GSA that overlaps the GSA of a license being transitioned pursuant to the foregoing two instances identified in items (i) and (ii). In short, transitioning more than two markets out from the initial market to be transitioned is not required.

investment standpoint than markets offering mere bare spectrum, because the former markets hold promise of an investment return.

²⁹ See Comments of the Rural Commenters at 2.

³⁰ See Spectrum Market Comments at 4. SML included an engineering statement which attempts to show how the transition of single station in Washington, D.C. will trigger a domino effect that requires the transition of 96 licensees and 172 stations within the Washington-New York corridor. See *id.* at App.1. In short, SML transitioned any immediate GSAs that overlapped the service area initially proposed to be transitioned, any GSAs that overlapped such immediate GSAs, any GSAs that overlapped the GSAs that overlapped such immediate GSAs, and so on and so on. See App.1 at 7.

E. The Record Does Not Support Underlay Operations In The MDS/ITFS Band

It is clear that the record does not support authorization of unlicensed operations on an “underlay” basis in the MDS/ITFS band, as nearly every one of the commenters addressing this subject were steadfastly opposed to that proposal.³¹ As Motorola, Inc. put it, the underlay concept would “introduce new sources of interference and create a more uncertain interference environment at the expense of licensees in the band that are seeking to deploy new services.”³² Moreover, such action would impose unjustifiable costs upon licensees. As Ericsson, Inc. notes, “devices designed to operate in the original noise floor would need potentially major modifications, or they would possibly be rendered obsolete. In either case, it would represent a significant cost burden on the licensee. The rising noise floor would also require operators to install additional base stations just to cover the same geographical area. Again, this would be costly for licensees.”³³ Given the lack of data required to make any kind of informed decisions on this subject, it would be inappropriate, arbitrary and capricious for the Commission to adopt any form of underlay concepts for the MDS/ITFS band in this proceeding.

³¹ *See, e.g.*, Comments of EarthLink, Inc. at 13-14; Comments of Motorola, Inc. at 15; Comments of Lucent Technologies at 4; Comments of Hardin and Associates, Inc. at 7; Comments of Telecommunications Industry Association at 2; Comments of BellSouth Corporation and BellSouth Wireless Cable, Inc. at 26-28; Joint Comments of Stanford University and Northeastern University at 21-23; Comments of the South Carolina Educational Television Commission at 6; Comments of the Rural Commenters at 9; Comments of Ericsson, Inc. at 9-13; Comments of IPWireless, Inc. at 21; Comments/Reply Comments of the Network for Instructional TV, Inc. at 8-9.

³² Comments of Motorola, Inc. at 13.

³³ Comments of Ericsson, Inc. at 10.

III. EMPLOYING A TWO-SIDED AUCTION FOR MDS/ITFS SPECTRUM WOULD CREATE COMPLICATIONS AND INEFFICIENCIES IN THE BAND TRANSITION

As Sprint explained in its comments, using the FCC to conduct a two-sided auction is not an efficient mechanism for getting MDS and ITFS licenses into the hands of those who value them most due largely to the potential complications associated with auctioning licenses that are bound by FCC-approved lease agreements. Subjecting the MDS/ITFS transition process to potential complications and delays seems particularly inefficient as there are a number of secondary market mechanisms that permit licensees to assign their spectrum at the time and under the terms of the licensees' choosing. The inferiority of the two-sided auction process to secondary market mechanisms in the MDS/ITFS context is well-documented by the commenters. As noted by the Illinois Institute of Technology, for example, ". . . a Commission-conducted two-sided auction will not be nearly as lucrative to educators than auctions they may conduct on their own," because such an auction would aggregate all of the ITFS spectrum in a single auction and thus "spread thinly" the amount of money available for any given license.³⁴ Further, as noted by Atlanta Interfaith Broadcasters, Inc., this dynamic is exacerbated by the current economic climate, which suggests that there will be less capital available for spectrum procurements.³⁵ More importantly, however, is the fact that most of the licensed ITFS spectrum is the subject of Commission-approved lease agreements, many of which contain provisions that effectively would preclude the licensee from entering into any two-sided auction.

³⁴ Comments of Illinois Institute of Technology at 24-25.

³⁵ See Comments of the Atlanta Interfaith Broadcasters, Inc. at 18 ("Holding [a two-sided] auction[] too soon will likely produce an undervaluation of the spectrum.").

IV. THE COMMISSION SHOULD NOT INTERFERE WITH EXISTING LEASES

There is no policy or legal justification for SML’s proposal to terminate existing leases for high-power spectrum and/or condition the issuance of new licenses upon the termination of existing leases. In connection with its opportunistic contentions that the MDS/ITFS band should be auctioned off, SML contends that pre-existing leases create an “enormous market distortion by preventing licensees from obtaining true value for the services they will facilitate,” and by “concentrating spectrum primarily in the hands of Sprint and the successor to WorldCom.”³⁶ As a starting point, the implied premise of SML’s arguments – that the goal of the new MDS/ITFS bandplan and rules should be to maximize the auction monetary value of the spectrum – has no support in the *NPRM*. The Commission’s stated goal for revamping the MDS/ITFS band is to facilitate the advancement and deployment of new and innovative services that meet market demand³⁷ – it is not to arbitrate the settled expectations of parties to private contractual relationships with respect to whether one party or the other has received “true value for the services” that party may facilitate.

Further, whatever enhanced value may be derived from the MDS/ITFS spectrum will be due mainly to the efforts of operators that will implement new services pursuant to the revised MDS/ITFS regulatory regime. Indeed, Sprint has been a leading proponent of revising the MDS/ITFS rules and developing the Coalition Proposal, having already invested considerable resources towards this end, precisely so it can make better and

³⁶ Comments of SML at 14.

³⁷ See *NPRM* at ¶¶ 32-43. Even the Commission’s suggestion of holding two-sided auctions is not grounded in maximizing spectrum value but rather in the Commission’s belief that such an auction might have some potential to facilitate the band transition. See *NPRM* at ¶ 243.

more efficient use of the spectrum it has acquired and leased. As detailed in Sprint’s comments, Sprint has launched various experimental deployments of second-generation broadband technologies to establish a service that meets the market demand for new broadband services.³⁸ The beneficiaries of these efforts will be the American public.³⁹

Unilateral termination of existing leases by the Commission would amount to retroactive interference with Commission-sanctioned business activities and would inequitably upset the reliance expectations of operators and licensees alike. Many of Sprint’s MDS/ITFS leases, for example, required Sprint to make front-loaded payments to the licensees, thus, cancellation of these leases would result in substantial losses to Sprint. All of these leases conform to the Commission’s rules and were approved by the Commission. To cancel these agreements would result not just in instant damages to the contracting parties, but would chill future participation in lease arrangements and other secondary market activities involving MDS/ITFS spectrum – at a time when the Commission is promoting secondary market activities as an efficient means to utilize spectrum⁴⁰ – as otherwise interested participants⁴¹ would lack the regulatory certainty required to make sound business judgments.⁴¹ Such result would be run counter to the Commission’s efforts to promote secondary market activities as an efficient means to utilize spectrum. Moreover, the Commission historically has refrained from interference

³⁸ See Comments of Sprint at 2-4.

³⁹ SML’s contention that Sprint’s spectrum access is much more than that which is required to “provide the services contemplated under the proposed new rules” is groundless – no person inside or outside of the FCC knows what types of services will be provided over the revised MDS/ITFS rule regime, which is the entire point of promoting flexible use to meet market demand.

⁴⁰ See, e.g., *Promoting Efficient Use of Spectrum Through Elimination of Barriers to the Development of Secondary Markets*, Report and Order and Further Notice of Proposed Rulemaking, FCC 03-113 (rel. Oct. 6, 2003) (“*Secondary Markets Order*”).

⁴¹ Moreover, such action could amount to unlawful retroactive rulemaking. See *Bowen v. Georgetown University Hospital*, 488 U.S. 204, 208-209 (1988).

with private contracts except where necessary to protect the interests of end users of telecommunications services, largely in recognition of the importance of maintaining contract certainty.⁴² The cases that SML cites to support its assertion that the Commission has authority to unilaterally terminate existing leases illustrate this point.⁴³ In fact, in adopting the two-way rules the Commission rejected similar requests that it require renegotiation of excess capacity leases made under the pre-existing rules, finding that “construction of existing agreements is a matter of contract law.”⁴⁴

⁴² As the Commission recently indicated in explaining the principles of the Sierra-Mobile doctrine – which sets the standard by which the Commission may alter the terms of a contract tariff at the behest of one of the original negotiating parties – “the long-term health of the communications market depends on the certainty and stability that stems from the predictable performance and enforcement of contracts.” *Ryder Communications, Inc. v. AT&T Corp.*, Memorandum Opinion and Order, 18 FCC Rcd 13603 at ¶ 24 (2003).

⁴³ For example, in the FNPRM section of the *Competitive Networks Order* to which SML refers, the Commission sought comment on the propriety of prohibiting carriers from enforcing exclusive access provisions in existing contracts in either commercial or residential multiple tenant environments (MTE). *See Promotion of Competitive Networks in Local Telecommunications Markets*, First Report and Order and Further Notice of Proposed Rulemaking, WT Docket No. 99-217, 15 FCC Rcd 22983, 23053 (2000) (“*Competitive Networks Order*”). The Commission indicated it could modify contracts between service providers and their customers for the purposes of preventing service rates that are unjust, unreasonable, unduly discriminatory, or preferential in violation of Section 206 of the Act. That is a completely different situation from canceling leases of spectrum between licensees and service providers, which does not involve service to end users and where both parties to the transaction are sophisticated bargainers. Moreover, in contemplating its legal authority to interfere with private contracts in the residential and MTE access context, the Commission acknowledged that, “We recognize [] that the modification of existing exclusive contracts by the Commission would have a significant effect on the investment interests of those building owners and carriers that have entered into such contracts. Thus, we are inclined to proceed cautiously in this area.” *Id.* at 23053. SML’s contention that the Commission retroactively invalidated leases between MDS and ITFS entities under Section 74.931(k) of the Commission’s rules, citing the Commission’s decision to require divestiture by cable operators of spectrum through licenses or leases for MDS stations with protected service areas overlapping the cable operator’s franchised areas, is incorrect. *See* Comments of SML at 16, *citing Amendment of Parts 21, 43, 74, 78, and 94 of the Commission’s Rules Governing Use of the Frequencies in the 2.1 and 2.5 GHz Bands Affecting: Private Operational-Fixed Microwave Service, Multipoint Distribution Service, Multichannel Multipoint Distribution Service, Instructional Television Fixed Service, and Cable Television Relay Service*, Second Report and Order, 6 FCC Rcd 6792, 6800 (1991). In that proceeding the Commission grandfathered all leases that were in force prior to issuance of public notice that divestiture could be required on the basis that divestiture would be a hardship to both cable operators and their customers, “whose service would be disrupted or eliminated.” *See id.* at 6800.

⁴⁴ *Amendment of Parts 21 and 74 to Enable Multipoint Distribution Service and Instructional Television Fixed Service Licensees to Engage in Fixed Two-Way Transmissions*, Report and Order, 13 FCC Rcd 19112, 19183 at ¶ 132 (1998) (“*Two-Way Order*”).

Finally, SML’s request for a “clarification” of lease provisions that establish the fifteen-year duration of the lease should be dismissed.⁴⁵ As a starting point, whether a given lease provision might allow a lease term not to expire in exactly fifteen years (which figure, it should be noted, did not come from the Commission but rather was jointly proposed by the WCA and the NIA) is irrelevant. The purpose of the Commission’s periodic expansions of lease term limits have been grounded in the need to provide enough “comfort regarding the long-term availability of excess capacity on ITFS channels” to ensure there would be sufficient availability of investment capital to cover the substantial operational and infrastructure costs associated with implementing the newer services contemplated for the spectrum.⁴⁶ In addition, the fifteen-year term was seen as providing certainty to ITFS licensees seeking the “assurance of long-term, stable maintenance and operational support offered by a longer lease term.”⁴⁷ The Commission did not specify how the fifteen-year term was to be calculated or codified within the lease, but rather expressly left negotiation of such terms to the parties.⁴⁸ In fact, the Commission has formally approved at least some of the specific lease terms for which SML requests clarification.⁴⁹

⁴⁵ Comments of SML at 17.

⁴⁶ *Two-Way Order* at ¶ 133. See also *Amendment of Part 74 of the Commission's Rules With Regard to the Instructional Television Fixed Service*, Report and Order, 10 FCC Rcd 2907, 2914 at ¶ 38 (1995).

⁴⁷ *Two-Way Order* at ¶ 133.

⁴⁸ See *id.* See also *id.* at 127 (wherein the Commission described its role in the lease process as “a limited role which allows for maximum possible flexibility of the parties in establishing excess capacity lease provisions.”). As the Commission expressed in refusing to mandate add-ins, such as certain rate guarantees, in ITFS leases, “We do not wish to get involved in arbitrating rate complaints in MDS/ITFS, and we believe that these are best private contractual matters between the parties.” *Two-Way Order* at ¶ 138.

⁴⁹ See Comments of SML at 17. For example, the Commission has reviewed and approved leases that included terms that (i) prohibited the licensee from negotiating with any party other than the lessee prior to the expiration of the lease, and (ii) provided the lessee with a right of first refusal for as long as five years. See Letter from Clay C. Pendarvis, Acting Chief, Distribution Services Branch, Video Services Division,

If anything, the Commission's recently-released *Secondary Markets Order*, although not encompassing the MDS/ITFS service, suggests that MDS/ITFS parties should be given wide latitude in negotiating leases. As the Commission concluded in that proceeding:

As a general matter, the greater the flexibility permitted by our [leasing] policies and rules, the more likely it is that parties will be able to enter into mutually desirable arrangements that are based on market demands. Wider use of spectrum leasing will, in turn, help achieve fuller utilization of the spectrum resource by making more spectrum available for the purposes for which it is needed, including new broadband services.⁵⁰

Among other things, the Commission will now permit liberal leases of unlimited duration for a wide range of services, including broadband and flexible use services with which MDS/ITFS operators intend to compete. Liberalizing MDS/ITFS lease requirements to maximize the flexibility of licensees to negotiate broad lease durations and other terms in accordance with their needs would place the nascent MDS/ITFS broadband services on a more equal footing with these broadband competitors.

V. THERE IS NO COMPETITIVE RATIONALE FOR IMPOSING CROSS-OWNERSHIP RESTRICTIONS

As Sprint explained in its comments, there is no basis for assuming that cross-ownership of MDS/ITFS spectrum by cable operators/franchisees, local exchange carriers (LECs), or commercial mobile radio service (CMRS) providers would pose any likelihood of competitive harm in any given market. Under the anticipated flexible use regime for MDS/ITFS spectrum, licensees will be able to provide fixed and/or mobile

Mass Media Bureau, to Swanton Local Schools, approving the Amended and Restated ITFS Excess Capacity Lease Agreement between Swanton Local Schools and American Telecasting of Toledo, Inc. for ITFS station, WNC249, Toledo, OH, Facility ID No: 64286 (dated March 26, 2002).

⁵⁰ *Secondary Markets Order* at ¶ 42. As the Commission also noted in that order, “[spectrum leasing] . . . reduce[s] spectrum acquisition costs . . . thus enabling more facilities-based competition . . .,” which further demonstrates that the Commission’s leasing policies are not directed at maximizing auction values, as SML contends, but rather maximizing spectrum utilization. *Id.* at ¶ 44.

services in various combinations in any market or combination of markets. Given that the geographic and product markets are unknown, Sprint agrees with the various commenters that advocate a case-by-case approach for addressing any competitive imbalances that may materialize.⁵¹

Teton and various other rural operators contend that DSL and cable “have a virtual lock on the broadband market” and that the justifications for the cable/MDS cross-ownership restrictions implemented in Section 21.912 of the Commission’s rules “continue to be valid.”⁵² This plainly is not the case. The justification for that restriction, as Teton points out, was to “encourage entry of alternative providers of multichannel *video* service dominated by incumbent cable systems in order to spur competition.”⁵³ DSL, however, is not a multichannel video service and the new broadband services that will be implemented under the new MDS/ITFS rules are not limited to video either. Further, no commenter provided any statistical evidence of domination in the broadband services market by DSL or cable operations. The Commission’s own figures on the broadband Internet access market appear to be limited to the market for *fixed* Internet access (*i.e.*, access provided to fixed residential terminals by cable, DSL, satellite and fixed services),⁵⁴ which arguably should not be interpreted to include the *mobile* wireless Internet access services contemplated under the revised MDS/ITFS rules. In any event, as the Commission acknowledged in the *3G First Report and Order*, even with respect to fixed broadband offerings, “In rural or underserved markets in the country, and for many

⁵¹ See, e.g., Comments of BellSouth Corporation and BellSouth Wireless Cable, Inc. at 24-25.

⁵² Comments of Teton Wireless Television, Inc. at 7.

⁵³ See *id.* (citing NPRM at 6776, ¶ 126) (*italics added*).

⁵⁴ See NPRM at 123-24.

educational users, ITFS/MMDS may be the *sole* provider of broadband service,” which suggests that the rural commenters’ concerns regarding the DSL/cable “duopoly” are, at best, overstated.⁵⁵ It is also noteworthy that the efforts of MDS/ITFS service providers towards establishing an even greater share of both the fixed and mobile broadband services market have been largely suspended in anticipation of the new rules under contemplation in this proceeding and the commercial availability of next-generation equipment that will follow.

The ability of DSL and cable operators to stifle competition is highly suspect. For example, the Commission eliminated spectrum caps for CMRS in the face of market concentrations similar to those attributed to the DSL/cable “duopoly,” noting that, “In the case of CMRS markets, for example, limits to economies of scale, technological compatibility issues, difficulties in finding a willing seller at a reasonable price, and capital market constraints limit consolidation.”⁵⁶ These types of market determinants apply with equal force in the open-ended broadband context that will characterize the new MDS/ITFS service offerings. The ability of incumbent LECs and cable operators to procure MDS/ITFS spectrum for the purpose of foreclosing competition to their existing

⁵⁵ *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*, First Report and Order and Memorandum Opinion and Order, 16 FCC Rcd 17222, 17233 n. 84 (2001) (italics added) (“*3G First Report and Order*”). Moreover, it is not at all clear whether, as a practical matter, DSL is capable of achieving or leveraging any form of market dominance, since, as Chairman Powell recently testified before Congress, “by many estimates DSL cannot reach 50% of households, because of technical limitations that can be overcome only by building out the network.” *Written Statement of Michael K. Powell, Chairman, Federal Communications Commission, on Competition Issues in the Telecommunications Industry Before the Committee on Commerce, Science, and Transportation United States Senate*, at 14 (Tuesday, January 14, 2003, 9:30 a.m.).

⁵⁶ *2000 Biennial Regulatory Review Spectrum Aggregation Limits for Commercial Mobile Radio Services*, Report and Order, FCC 01-328 at ¶ 33 (rel. Dec. 18, 2001) (“*Spectrum Cap Report and Order*”). Indeed, the Commission expressly rejected the notion that Herfindahl-Hirschman Indices (HHIs) were dispositive on competition, noting that “we have previously found that ‘an HHI analysis alone is not determinative and does not substitute for our more detailed examination of competitive considerations.’” *Id.* (citations omitted).

broadband Internet offerings is further curtailed by the Commission's performance requirements, which prevent spectrum warehousing. Decisions regarding mandatory access to the incumbent network facilities further suggest that incumbents may lack the ability to forestall competition. For example, the 9th Circuit Court of Appeal's recent decision in *Brand X Internet Services v. FCC* may further enhance competition by opening access to cable operators' networks by independent ISPs, like EarthLink, further minimizing the need for any kind of *a priori* cross-ownership restrictions.⁵⁷ In any event, as the Commission noted in eliminating the CMRS spectrum cap, "antitrust review by the [Department of Justice] and section 310(d) review by the Commission continue to serve as protection against levels of consolidation that would impair competition."⁵⁸

VI. ITFS ELIGIBILITY RESTRICTIONS SHOULD BE REMOVED AND ITFS LICENSEES SHOULD BE PERMITTED TO SELL OR LEASE THEIR SPECTRUM AT THEIR SOLE DISCRETION

As espoused throughout its comments and these reply comments, Sprint fully supports and acknowledges the important public interests served by ITFS licensees. Sprint's support of and involvement with the educational community extends well beyond its ITFS lease relationships.⁵⁹ Through its leases with hundreds of ITFS licensees

⁵⁷ *Brand X Internet Services v. FCC*, Case No. 02-70518, FCC-Act 2-77, United States Court of Appeals for the Ninth Circuit (Oct. 6, 2003). In *Brand X*, the court vacated the Commission's earlier determination in the *Declaratory Ruling* that cable modem service is properly classified as an interstate information service rather than a separate offering of telecommunications service, and thus not subject to regulation on a common-carriage basis. See *Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities; Internet Over Cable Declaratory Ruling; Appropriate Regulatory Treatment for Broadband Access to the Internet Over Cable Facilities*, Declaratory Ruling and Notice of Proposed Rulemaking, 17 FCC Rcd 4798 (2002) ("*Declaratory Ruling*").

⁵⁸ *Spectrum Cap Report and Order* at ¶ 33.

⁵⁹ For example, the Sprint Foundation is a philanthropic organization led by a select group of educators who help direct Sprint in many of its educational initiatives and direct millions of dollars each year into local educational projects. Sprint also funds several "showcase" schools throughout the country each year to highlight and demonstrate the latest telecommunications tools for educators. Sprint is also a major provider of telecommunication services to educational institutions. Sprint is involved with a contract to

across over 90 markets, Sprint has entered into relationships that provide educational institutions ranging in size from small K-12 schools to State universities with operational support, engineering support, equipment, tower site maintenance and access, receive sites, and lease payments.⁶⁰ The consideration received by ITFS licensees supports their individual educational missions and instructional needs. In that regard, it has been Sprint's experience that each ITFS licensee has its own unique requirements, and the Commission historically has recognized this fact by providing ITFS licensees with broad flexibility to negotiate excess capacity leases that meet their particular needs.

Accordingly, as Sprint stated in its comments, ITFS eligibility restrictions should be removed and ITFS licensees should be permitted to sell and/or lease some or all of their spectrum at their sole discretion. As described above, the consideration provided to ITFS licensees by lessors and/or purchasers of excess capacity support the important educational missions of the ITFS licensees. Lifting restrictions on ITFS eligibility would enhance the flexibility of existing ITFS licensees to make the best use of their spectrum. In addition, allowing ITFS licensees, at their sole discretion, to assign or lease their licenses in whole or in part to commercial system operators encourages full development and intensive use of available spectrum.

Most commenters supporting the continuation of closed eligibility for ITFS spectrum proffer public interest arguments regarding the educational purposes for which

outfit Case Western University with a next-generation Internet network that will deliver multi-megabit connections that has been reported to be one of the fastest LAN's in the world.

⁶⁰ Typically, the support that Sprint provides the ITFS licensees with which it has relationships includes costs of reception of programming and transmission to end-users. In addition, it is not unusual for Sprint to design, supply, manage and complete all licensing and equipment requirements of the ITFS licensee. Further, Sprint often will maintain the ITFS licensee's video programming network throughout the term of its lease with the ITFS licensee.

this spectrum has been reserved.⁶¹ As noted by the Network for Instructional TV, Inc. (NITV), however, “[e]liminating restrictions on ITFS eligibility would empower educators to determine how best to utilize their spectrum assets to further their educational missions . . . ,” and “would unlock the full educational potential of ITFS spectrum by promoting the infusion of investment capital into ITFS that would accelerate the development and implementation of technology to promote educational ends.”⁶² In addition, as the Rural Commenters note, such action would provide an additional source of unencumbered spectrum for rural operators,⁶³ which is consistent with the Commission’s current initiatives to “minimize regulatory costs and eliminate unnecessary regulatory barriers to the deployment of spectrum-based services in rural areas.”⁶⁴

Further, it appears that ITFS licensees have alternative methods for implementing remote learning programs, such as Internet-based programs.⁶⁵ While some licensees oppose open eligibility on grounds that their needs cannot be served today by streaming video over the Internet, these ITFS licensees would not and should not be required to sell their spectrum. Indeed, opening ITFS eligibility would not impact any existing ITFS licensees, who may continue to lease and operate their spectrum to meet their specific

⁶¹ See, e.g., Joint Comments of Stanford University and Northeastern University at 4-6; Comments of the Educational Community at 4-5.

⁶² Comments/Reply Comments of NITV at 3 (filed Oct. 16, 2003).

⁶³ See Comments of the Rural Commenters at 2.

⁶⁴ *Facilitating the Provision of Spectrum-Based Service to Rural Areas and Promoting Opportunities for Rural Telephone Companies to Provide Spectrum-Based Services*, Notice of Proposed Rulemaking, FCC 03-222 at ¶ 9 (rel. Oct. 6, 2003).

⁶⁵ NITV, for example, has launched two Internet sites – TeachersFirst.com and TeachersAndFamilies.com – to provide resources for classroom instruction. See Comments of NITV at 2. GMUIF identifies a wide range of educational programming that it transmits as streaming video over the Internet, although it contends that the Internet ultimately is an inferior medium to high-power ITFS video transmissions. See Comments of GMUIF at 10-11. See also Comments of the School Board of Miami-Dade County, Florida at 5-6.

needs. As technology improves, ITFS licensees may find that they can migrate to the Internet and reap the benefits of selling or leasing their spectrum.

Restricting ITFS eligibility solely to maximize ITFS bargaining power would achieve inefficient results. The Education Community, for example, suggests that “all ITFS licensees will be affected” if ITFS licensees are sold at auction by, among other things, “strip[ping] [remaining licensees] of bargaining power to negotiate favorable excess capacity leases.”⁶⁶ The Education Community basically argues to maintain market inefficiencies – in the form of eligibility restrictions that form a bottleneck to market entry – so that ITFS licensees can keep spectrum lease prices artificially high. If educational institutions should be allowed to maximize the monetary value of their spectrum, as the Education Community clearly argues, however, it follows that they should be allowed to sell their spectrum, which would provide even higher one-time revenues than leasing.⁶⁷ The end-result of leasing and selling is the same: revenues generated from spectrum holdings are channeled back into educational programs. The educational institutions themselves are best situated to decide whether their specific educational programs or other purposes would be better served by the higher one-time

⁶⁶ Comments of Education Community at 7.

⁶⁷ An alternative method to address the concerns of those ITFS licensees who fear that open eligibility will injure the interests of the entire ITFS community would be to require that in cases where a commercial operator seeks to acquire an ITFS’s entire channel assignment, such commercial operator would have to make five percent of the capacity of a digital system (or twenty-five percent of an analog video system) available on an ongoing basis free-of-charge to non-profit educational organizations and institutions. *See* Comments of NITV at 6. Such a minimum requirement would maintain the status quo for all future ITFS-eligible users, would allow existing ITFS licensees to disentangle themselves from the day-to-day process of operating and/or overseeing the provision of programming, and would allow existing ITFS licensees to keep or sell as much of their spectrum as they deem appropriate to meet their specific educational requirements. Alternatively, as EarthLink suggests, ITFS licensees could sell their spectrum in the lower and upper band segments to commercial entities, while retaining a 6 MHz channel in the middle band segment for high-power operations. *See* Comments of EarthLink at 10-11.

revenues from a sale of their spectrum or long-term lease revenues.⁶⁸ The Educational Community, in effect, seeks to place that choice in the hands of the Federal Communications Commission, which has neither the expertise nor the mandate to make that decision.⁶⁹ Given the volume of ITFS licensees that have spoken out against permitting the sale of ITFS spectrum to commercial entities, it seems probable that large numbers of ITFS licensees have no interest in selling their spectrum. Accordingly, the adoption of open eligibility should not “vitiolate the fundamental character of ITFS spectrum” as the Educational Community contends.⁷⁰

VII. MISCELLANEOUS ISSUES

The Commission should reject the suggestion of IPWireless, Inc. that all customer premises equipment (CPE) response stations be limited to 2 watts EIRP. There is no technical or operational justification for treating fixed, mobile and portable devices in an identical manner, and such action is wholly inconsistent with the goal of promoting flexible use of the MDS/ITFS band. IPWireless, Inc.’s suggestion that a 2 watt limit would assure compliance with the Commission’s existing RF exposure rules is specious. As the Commission itself noted in the *NPRM*, “compliance with our safety rules may by itself necessitate compliance with a 2-watt limit for devices that are normally held close to the user’s body, [however] those rules allow higher power levels in circumstances

⁶⁸ Educational Community suggests that “cash-strapped” educational institutions may feel pressured to sell their valuable spectrum to meet immediate budgetary shortfalls, but budgetary decisions are clearly best dealt with by the institutions themselves. *See* Comments of Education Community at 8.

⁶⁹ The George Mason University Instructional Foundation, Inc.’s (GMUIF) contention that ITFS licensees must “not be allowed to abandon [their educational] mission altogether” by selling their licenses to commercial interests represents a similarly paternalistic view of the FCC’s mission and, thus, should be rejected. Comments of GMUIF at 17.

⁷⁰ Comments of Education Community at 4.

where the response station's transmission antenna is designed to be used at least twenty centimeters away from the body of the user or any nearby persons."⁷¹

Finally, Sprint reiterates its concerns regarding the Commission's proposal to establish MDS service in the Gulf region. As Sprint explained in its comments, there are legitimate concerns that activity in the Gulf region – and, in particular, the unique propagation characteristics of signals over large bodies of water – could result in interference to land-based operations.⁷² Sprint proposed certain measures that the Commission should include in any Gulf region service rules – such as assuring 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 establishing 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. No other party except the WCA commented on this subject. Given the sparse record on this subject, the Commission should defer action on this matter until such time as an adequate record has been developed. If, however, the Commission elects to move forward with the establishment of a Gulf service region, it should adhere to the comments of Sprint and the WCA, which currently comprise the limited record on this subject.

⁷¹ *NPRM* at 134.

⁷² *See* Comments of Sprint at 15-16.

VIII. CONCLUSION

Sprint urges the Commission to adopt the MDS/ITFS rule and spectrum assignment revisions contained in the Coalition Proposal, and adopt the recommendations raised specifically by Sprint, outlined above and in its comments. As described above, the various alternative bandplans and transition plans suggested in the comments do not provide the same degree of flexibility, do not offer the same promise of spectral efficiency, and do not reasonably accommodate the needs of incumbents and, therefore, should be rejected.

Respectfully submitted,

Sprint Corporation
/s/ Luisa L. Lancetti
Luisa L. Lancetti
Vice President, Wireless Regulatory
Affairs
David Munson
Attorney
401 9th St. NW
Washington, DC 20004
(202) 585-1923

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