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Before the
Federal Communications Commission
Washington, D.C. 20554

FCC 94-147

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In re)
)
Amendment of Part 74 of the)
Commission's Rules Governing Use)
of the Frequencies in the)
Instructional Television Fixed Service)

MM Docket No. 93-106 ✓

REPORT AND ORDER

Adopted: June 9, 1994

Released: July 6, 1994

By the Commission: Commissioner Quello issuing a statement.

1. On April 26, 1993, the Commission released a Notice of Proposed Rule Making, 8 F.C.C. Rcd 2828 (1993), which proposed to permit Instructional Television Fixed Service (ITFS) licensees to shift, or "channel load," the requisite ITFS programming of 20 hours per channel per week to as few as one channel. The dual objectives of the Notice were to insure full spectrum utilization, by freeing up channels for licensee leasing to "wireless cable"¹ operators, while preserving the primary purpose of ITFS. During the extended reply comment period, the Wireless Cable Association (WCA), submitted an industry-wide channel loading compromise agreement it had entered into with numerous educators. We have reviewed the comments and the compromise proposal in this proceeding and believe that a revision of our rules and policies to permit channel loading is warranted, until we consider digital compression's impact on the ITFS service in a future notice and comment proceeding.

¹ "Wireless cable" is a term used to describe Multipoint Distribution Service (MDS) and Multichannel Multipoint Distribution Service (MMDS), which utilize over-the-air microwave radio channels rather than coaxial or fiber optic cable to deliver video material to subscribers. There are 12 or 13 channels available to wireless cable for full-time use: 11 MMDS channels, E1-E4, F1-F4, and H1-H3; two single-channel MDS channels available in 50 cities; and one single-channel MDS channel in the rest of the country. In addition, wireless cable has access to the 20 ITFS channels, A1-A4, B1-B4, C1-C4, D1-D4, and G1-G4, on a leased, part-time basis, as well as to that portion of the spectrum, under certain conditions, if ITFS channels are vacant. See Second Wireless Cable Order, 6 F.C.C. Rcd 6792, 6801-06 (1991). We do not intend to suggest by our use of the term "wireless cable" that it constitutes "cable" service for statutory or regulatory purposes.

BACKGROUND

2. The Notice emanated from a July 23, 1992 Public Notice issued by the Commission in response to the submission by four ITFS permittees of revised programming schedules and accompanying requests for waiver of certain of our programming rules.² Specifically, each of the permittees, authorized to operate four channels at Spokane, Washington, proposed to "channel load," that is, to move all of their minimum ITFS program requirements of 20 hours per channel per week, for a total of 80 hours per week, onto one of its four channels so that each could lease its remaining three channels on a 24-hour basis to a wireless cable operator. Because their proposals conflicted with our minimum programming requirements for licensees leasing excess capacity, the permittees simultaneously requested waiver of Sections 74.931(a) and (e)(2) of the Commission's Rules. Section 74.931(a) provides that every authorized channel "must be used to transmit formal educational programming offered for credit to enrolled students of accredited schools." And Section 74.931(e)(2) requires that an ITFS licensee leasing its excess capacity to a wireless cable operator provide at least 20 hours per channel per week of ITFS programming and reserve an additional 20 hours of "recapture" time per channel per week, subject to one year's advance written notification. The Public Notice sought comment on the question of whether the permittees' waiver requests would best be addressed in a waiver or a rule making proceeding. Determining that the proper avenue for addressing the fundamental regulatory concerns implicated by the waiver requests was by rule making, the Commission initiated the Notice to solicit further comment on its minimum ITFS programming requirements.

3. At the outset, the Notice explained the Commission's aims in sanctioning, in 1991, see Wireless Cable Order Recon., 6 F.C.C. Rcd 6764 (1991), the use of "channel mapping," a technology which enables a wireless cable lessee to free up as many as three channels in a four-channel ITFS system for full-time commercial programming. 8 F.C.C. Rcd at 2831.³ Those objectives were to allow a less disruptive scheduling of instructional and commercial uses of ITFS channels to the benefit of both educational institutions and wireless cable operators. 8 F.C.C. Rcd at 2831. What the Commission did not intend, however, was a revision or elimination of the ITFS rules governing minimum instructional use, Section 74.931, or of the demonstration of need for the number of channels requested, Section 74.902. Id. Nor did the Commission envision that channel mapping technology would be employed to divert all instructional programming to as few as one channel.

² The ITFS licensees were North American Catholic Educational Programming Foundation, Inc., Spokane Community College, Spokane Falls Community College, and Gonzaga University Telecommunications Association. MMB Files 920219A, 920220A, 920220B, and 920224A.

³ It does so by transmitting a staggered schedule of ITFS programming over each of the four channels and converting it, via set-top box, into uninterrupted service to student-viewers on fewer than the four channels in an authorized channel group.

Id. Nevertheless, the Notice proposed a relaxation of the per channel minimum use requirements so that ITFS applicants could request up to four channels, provided they proposed a minimum of 80 hours of instructional programming, regardless of the distribution of that programming via channel mapping. Id. Based upon this less restrictive proposal for those ITFS applicants utilizing costly channel mapping technology,⁴ the Commission reasoned that it would be unjustifiable to prohibit the use of cost-free channel loading in that each approach is a means to the same end: making channels available on a full-time basis for leasing to wireless cable operators. Id. "The policy debate at issue here is not the mechanism by which ITFS channel time is made available to wireless cable operators," the Notice stated, "but how we can preserve the primary purpose of ITFS in light of our proposals here."

4. In proposing the temporary shifting of ITFS programming to fewer than four channels in an authorized channel group, the overarching objectives of the Notice were to meet the asserted demand of wireless cable operators for additional channels while insuring the integrity of the ITFS spectrum. 8 F.C.C. Rcd at 2832. Accordingly, the Notice queried the need in a channel loading scheme for mechanisms to safeguard what has been the primary purpose of ITFS since its inception in 1963: the transmission of instructional material to accredited public and private schools, colleges and universities for the formal education of students. 8 F.C.C. Rcd at 2828. To that end, the Notice proposed general measures for preserving the primary purpose of ITFS, seeking specific responses to the following: (1) the maximum number of channels to be freed up for full-time commercial use; (2) whether the required ITFS programming must be scheduled during specific times of the day; (3) how many of the non-loaded channels should be subject to recapture by the licensee; (4) the benefits of awarding a comparative advantage in mutually exclusive cases to applicants refraining from the use of channel loading; (5) the imposition of a heightened demonstration of bona fide educational intent from those proposing to channel load; and (6) any other potential protective restrictions. Notice, 8 F.C.C. Rcd at 2832. Additionally, the Notice proposed to permit channel loading on a temporary basis, reasoning that within three to five years digital compression would become a viable alternative for generating additional channel capacity.⁵ Finally, the Notice

⁴ The cost of a channel-mapping switch alone, according to one commenter in the Notice proceeding, is \$115,000, in addition to \$100,000 for time-base correction equipment, \$700 per month for increased space, power and environmental controls associated with the switching equipment, and \$150 for each set-top converter to be installed on every subscriber's and receive site's television sets. 8 F.C.C. Rcd at 2830. Other drawbacks to the technology include the impossibilities of viewing one channel while recording another on a video cassette recorder, of consecutively taping programs on separate channels, and of utilizing the "picture-in-picture" feature of newer television and video cassette recorders without the aid of additional equipment. Id. at 2830, n. 9.

⁵ Implementation of this technology may make it possible for the licensee of an analog four-channel ITFS station to simultaneously transmit at least 16 digitally "compressed" video programs over the station's 24 MHz of spectrum.

urged commenters to address, in light of the channel loading-proposal, Section 74.902(d). That rule provides that applicants not apply for more channels than they intend to construct within a reasonable time, that channels be authorized to applicants based on the "demonstration of need," and that a licensee is limited to the assignment of no more than four channels in a single area of operation.

COMMENTS

5. Commenters⁶ were evenly split in their support for, and opposition to, the channel loading proposal. While all parties objecting to the interim proposal are composed of educators, those favoring channel loading comprise both wireless cable operators and educators, most of which are involved in excess capacity leasing arrangements. Channel loading supporters insisted that the interim proposal would not constitute de facto reallocation of the spectrum because it would be a permissive practice, not one ordered by the Commission, and one in which the ITFS licensee could engage, in its sole discretion. Wireless cable operator WJB-TV Limited Partnership (WJB-TV) argued that ITFS licensees' fears of direct licensure of ITFS channels to MMDS were unwarranted in that wireless operators rely on their partnerships with local educational institutions as a source of goodwill and positive public relations. However, WJB-TV, Transworld Telecommunications, Inc. (Transworld), and the Wireless Cable Association International, Inc. (WCA), which are, or represent, wireless cable operators, separately asserted that a Commission-mandated licensee right to ready recapture of all four group channels for simultaneous transmission of ITFS programming would "undercut" the goals channel loading attempts to advance. So long as licensees can assert that right, the operators will be compelled to either install channel mapping technology as a backup device or to refrain entirely from entering into lease agreements with ITFS entities. Rather than establish simultaneous recapture as a compulsory right, WJB-TV and WCA suggested, the Commission should leave that matter as a lease agreement negotiating point between the ITFS licensee and wireless cable operator, affording the ITFS licensee the freedom to contract for its 80 hours of weekly recapture time on one, two, three or all four channels.

6. Numerous educators disagreed, viewing the issue of ready recapture as inseparable from that of de facto reallocation of the ITFS spectrum. North American Catholic Educational Programming Foundation, Inc. (NACEPF), one of the four permittees originally seeking waiver of the programming rules, and ITFS Parties, comprising largely college and university systems and state educational television agencies which provisionally favor channel loading,⁷

⁶ A list of the parties filing comments and replies is provided in Appendix A, with abbreviated descriptions of associations and joint parties.

⁷ ITFS Parties is composed of: American Council on Education, American Association of Community Colleges, Alliance for Higher Education, Arizona Board of Regents for Benefit of the University of Arizona, Board of Regents of the University of Wisconsin System, Iowa Public Broadcasting Board, Regents of the University of New Mexico and Board of Education of the City of

separately emphasized that any channel-shifting scheme include the non-negotiable right to recapture all four ITFS channels upon reasonable notice to the wireless operator, with no ensuing contractual cost or penalty to the educator. National ITFS Association (NIA), which represents more than 60 educators in 26 states, concurred, stating that without "this fundamental concept," up to 75 percent of the ITFS spectrum would be ceded to wireless cable. Trans Video Communications, Inc., an ITFS licensee in Brooklyn, and the Trustees of Leland Stanford Junior University, an ITFS licensee in San Francisco (jointly, TVC/Stanford), echoed that assessment, arguing that channel loading employed in the extreme would result in as many as three channels of an individual ITFS licensee, and as many as 15 of 20 ITFS channels in a market, failing to comply with the primary purpose of ITFS, the transmission of formal education. To transmit the 80 requisite hours of ITFS programming per week over one channel, TVC/Stanford observed, would require a 16-hour programming day, Monday through Friday. Such a schedule, according to TVC/Stanford, as well as the University of Maryland, means that the channel-loading licensee is either serving students during the evening hours, an acceptable use of the ITFS spectrum, or, more likely, is recording the programs at night for daytime playback, an inefficient use of authorized channel capacity. In sum, TVC/Stanford contended, not only does the Commission's channel-loading proposal constitute a reallocation of spectrum, but it violates the Communications Act as much now as it did less than three years ago, when the Commission, in Wireless Cable Order, 5 F.C.C. Rcd 6410, 6416 (1991), rejected it on those very bases.

7. As for the continued validity of Section 74.902(d) in the context of a channel-loading scheme, Rural Wireless Cable Group (Rural Wireless Group), whose ad hoc membership includes five wireless cable companies, suggested that because a licensee with fewer than four channels is an "unattractive partner," the Commission should alter the demonstration-of-need portion of Section 74.902(d) so that an applicant's need is "presumptively" provided where it proposes to lease excess capacity to a wireless operator. While national licensee Hispanic Information and Telecommunications Network, Inc. (HITN) would advocate relaxing the demonstration of need, it "vehemently" opposed applying Rural Wireless Group's presumption to the four-channel-limitation portion of the rule. To do so, HITN contended, would encourage the wholesale licensing and warehousing of channels by commercial operators, foreclosing educators from utilizing the ITFS spectrum.

8. Finally, those opposing channel loading, and even several supporting it, indicated that instituting certain safeguards might render that practice acceptable to both educators and wireless operators, while protecting the primary purpose of the spectrum. The following are summaries of commenters' positions on safeguards proposed by the Commission in the Notice:

Number of channels for commercial use. Commenters favoring channel loading, such as Rural Wireless Group and the University of California suggested that wireless operators and ITFS entities should mutually determine the number of

Albuquerque, South Carolina Educational Television Commission, State of Wisconsin - Educational Communications Board, and University of Maine System.

channels to be used for full-time commercial programming. In contrast, the Board of Cooperative Educational Services of Nassau County, New York (Nassau County), which opposes channel loading, urged that any channel-loading scheme be limited to 50 percent of the authorized channels, while TVC/Stanford asserted that only one channel be permitted to be leased on a 24-hour basis.

Time-of-day restrictions. Three parties favoring channel loading noted their opposition to the scheduling of ITFS programming on the loaded channels during specific times of the day, particularly between the hours of 8:00 a.m. and 10:00 p.m., Monday through Saturday, as proposed in the Notice. WCA and Transworld argued that most licensees will "invariably" schedule their requisite ITFS programming during those hours and that imposition of time-of-day restrictions would be inconsistent with the Commission's recent elimination, in Wireless Cable Order Recon., 6 F.C.C. Rcd at 6774, of such strictures. Parkland College, which caters to parents and other working adults pursuing degrees or educational enrichment in central Illinois, also rejected scheduling restraints. Conversely, Nassau County advocated that all educational programming be scheduled between 8:00 a.m. and 4:00 p.m., Monday through Saturday, and TVC/Stanford asserted that accommodation of a "typical" school's needs necessitates that all ITFS programming must be transmitted between 8:00 a.m. and 5:00 p.m., Monday through Friday.

Comparative advantage to applicants not channel loading. Commenters favoring channel loading and addressing this proposed safeguard objected to penalizing applicants which, they claimed, should instead be rewarded for both providing the requisite amount of ITFS programming and enabling wireless cable to better compete in the video marketplace. Moreover, they noted, under Section 74.913(b)(4), the Commission already bestows a preference upon applicants proposing to use substantially all of their airtime for formal educational and/or ITFS programming. TVC/Stanford, which objects to channel loading, endorsed the awarding of one merit point for each channel offering a daily minimum of five hours of ITFS programming. This comparative preference, TVC/Leland asserted, would promote use of the ITFS spectrum for instructional purposes and deter speculative applications.

Heightened demonstration of educational intent. Transworld assailed the need for a more elaborate showing from those utilizing channel loading, concluding that the Commission's eligibility requirements are sufficient to deter ITFS applicants seeking a "financial bonanza." Other commenters also favoring the unrestricted use of channel loading, however, articulated the need for some vehicle to eliminate unqualified educator-applicants. Cross Country Wireless Cable, California State Polytechnic University at Pomona, Regents of the University of California, Diocese of San Bernardino Education & Welfare Corporation, and San Bernardino Community College District (jointly, Cross Country/Box Springs), which support channel loading, and HITN, which conditionally does so, separately urged the Commission to require applicants proposing to channel load to justify their need for shifting their programming to fewer than four channels and to describe the duration and extent of that practice. Existing ITFS licensees intending to channel load, Cross Country/Box Springs added, should justify their need to do so. ITFS Parties, which originated the notion of a heightened demonstration of educational bona fides, see Notice, 8 F.C.C. Rcd at 2831, urged the Commission to engage in

"healthy skepticism" in determining whether receive sites are actually incorporating the programming into the curricula of accredited educational receive sites. Although stating their reluctance to augment licensees' regulatory requirements, ITFS Parties urged the filing by channel-loading ITFS licensees of annual reports, detailing the actual educational use of the ITFS facilities during the previous year. Catholic Television Network (Catholic TV) also advocated that licensees be required to submit "periodic evidence" of the educational uses of its channels, including how many matriculating students benefit from the ITFS service and how the channel-loading scheme jibes with the classroom hours of operation.

Other safeguards. Cross Country/Box Springs and the University of California endorsed the Commission's installation of an ITFS telephone "advice line" in order that licensees may readily seek Commission assistance on their rights and responsibilities, especially with regard to educational program scheduling and the leasing of airtime to wireless cable operators. In this way, the commenters contended, the Commission could educate ITFS licensees with limited experience in negotiating leasing agreements, thereby preserving the primary use of the ITFS spectrum.

Termination date. Several commenters advocating channel loading took issue with the proposed three- to five-year termination date of the proposed rules changes. Rural Wireless Group, voicing the concerns of small wireless cable system operators, recommended that the Commission extend the "sunset" period for channel loading to a date 10 years following the arrival of digital compression technology. This, it argued, would allow for full amortization of the current analog equipment and for raising capital to purchase digital equipment. Composed of about a dozen wireless operators owning systems across the country, the Coalition of Concerned Wireless Cable Operators, describing the sunset date as "inflexible," advanced a certification process, whereby operators certifying in good faith their inability to convert to digital technology would obtain an additional five years to make the transition from analog. Similarly, WJB-TV suggested that each wireless cable system continue to employ channel loading until it converts to digital. In contrast, NIA, the only opposition commenter addressing the termination date issue, supported a shorter, two-year sunset period, grounded in the theory, it stated, that a shorter deadline can be more readily extended than a longer one can be abbreviated.

COMPROMISE AGREEMENT

9. On August 19, 1993, the extended deadline for reply comments in this proceeding, WCA submitted to the Commission for consideration an industry-wide channel loading compromise, agreed to by WCA, NIA and the ITFS Parties. Collectively, the three groups comprise licensees in the operation of virtually every wireless cable system in the United States, including ITFS and MDS, programming networks, wireless cable equipment manufacturers, and more than 70 educators nationwide, including the American Council on Education, the American Association of Community Colleges and the Alliance for Higher Education. The compromise, which attempts to resolve the most contentious issue confronting educators and wireless operators, ready recapture time, is predicated upon the concept that an individual licensee's leased ITFS facility

is part of a larger transmission system in a given market, along with other leased ITFS stations and wireless cable operations.

10. Based on this model, the compromise contains five elements. First, it contemplates a continued minimum total of 40 hours per channel per week of ITFS programming, composed of 20 hours preserved for immediate use and of the remaining 20 hours subject to ready recapture. Second, as to the preserved time, each licensee must actually transmit at least 20 hours of ITFS programming per channel per week, 12 hours per channel per week for the first two years, as is now permitted. However, a licensee may load its total requirements onto fewer than all of the channels to which it is authorized. Thus, a licensee holding four authorized channels may load its weekly total required programming time, i.e., 20 hours multiplied by four channels, or 80 hours, onto fewer than the four channels. Under the terms of the compromise, transmission of this preserved amount of programming must be over channels licensed to the ITFS licensee. Third, and what WCA terms as "key" to the compromise, an ITFS licensee may agree to the transmission of its recapture time over any channel in the system, whether it be an ITFS or MDS channel. Yet, a licensee has the unabridgeable right to recapture simultaneous use of airtime on the number of channels for which it is authorized. This right, according to the compromise, cannot be contractually diminished and any lease agreement attempting to do so will be overridden by this restriction. Fourth, leasing and scheduling consistent with the compromise will establish an applicant's Section 74.902(d) "need" for channels and entitle a licensee to renewal of its authorization. And no demerit will be assessed against channel-loading applicants under the Commission's comparative selection procedure for mutually exclusive applicants. Fifth, the compromise provides that a channel-loading scheme comporting with the compromise not serve as a basis for future efforts to seek reallocation of "non-loaded" ITFS spectrum for commercial use and the parties to the compromise have agreed not to seek any such reallocation.

11. This five-part compromise was the subject of a 30-day comment period, beginning on September 28, 1993. See Order Granting Extension of Time in MM Docket No. 93-106, 8 F.C.C. Rcd 5245 (MMB 1993); 58 Fed. Reg. 42522 (August 10, 1993). Of the 27 parties addressing the proposal, 23 unconditionally support it; two, NIA and ITFS Parties, reemphasize their support based upon the adoption of all five elements; WJB-TV adamantly opposes its simultaneous recapture provision; and TVC renounces the entire compromise as an impermissible reallocation of the spectrum.

DISCUSSION

12. More than a decade ago, the Commission permitted licensees to lease their unused transmission time as a means of satisfying the increasing needs of MMDS operators for additional channel capacity and of meeting the mounting costs to educators of constructing and operating an ITFS system. Report and Order in Gen. Docket No. 80-112 and CC Docket No. 80-116, 94 F.C.C. 2d 1203, 1248-50 (1983). In so doing, however, the Commission restated its commitment to the primary purpose of the ITFS service, the transmission of programming for the formal education of students. Id. at 1253. Since then, the Commission's standards for the minimum required hours of ITFS programming have

evolved in order to facilitate the ability of educators to finance the development of ITFS facilities and, at the same time, to ensure the full and efficient utilization of the spectrum, by allowing wireless cable operators to utilize the excess capacity of an ITFS licensee so as to compete with conventional cable operators. Now before us is a proposal for channel loading, which, rather than constituting a de facto reallocation of the ITFS spectrum to MMDS, defers to the educational purpose of the service by maintaining the current requisite total of 20 hours per channel per week of ITFS programming and endowing licensees with the unbridgeable right of simultaneous recapture of an additional 20 hours per channel per week. Channel loading, therefore, does not alter the obligation of leasing ITFS licensees to transmit a total of 80 hours of ITFS program each week, but permits that programming to be consolidated so as to yield to wireless cable operators the benefit of full use of some ITFS channels. In addition, a natural by-product of channel loading will be the enhanced value of ITFS licensees' excess capacity to wireless cable operators, who may now be willing to supplement financial contributions already made to educators via their leasing arrangements. This may, in turn, contribute to the overall viability of the ITFS service and its significant public interest benefits.

13. Before the Commission permitted leasing of excess capacity, the spectrum initially allotted for ITFS was so underutilized outside metropolitan areas that the Commission reallocated two entire ITFS channel groups, or eight channels, to MMDS. Id. With the advent of leasing, demand for ITFS channels has surged. See Notice, 8 F.C.C. Rcd at 2832 n. 14. Leasing has prompted revenue-sharing arrangements between ITFS licensees and wireless cable operators, see id.,⁸ resulting not only in full use of the spectrum, but in full realization by educators of what was once only an unattainable aspiration: to become actively engaged in a technology that exposes their students to educational and interactive instructional programming previously inaccessible to them. But revenues are key to this ITFS-MMDS partnership. Leasing channel capacity for the transmission of commercial programming generates revenues that may be vital to the continuing operations of authorized ITFS systems, to the successful deployment in many markets of ITFS service, and to the service's public interest benefits. Our sanctioning of channel mapping a few years ago, in Wireless Cable Order Recon., 6 F.C.C. Rcd at 6774, was an attempt to free up channels to yield such benefits, "allowing for sufficient use of all channel capacity while balancing the interests of both wireless cable operators and ITFS licensees." But, as Parkland College noted, not only is a channel mapping system expensive to build, but it is "prone to equipment breakdowns, operator errors, and mistakes due to miscommunication between the separate parties who may schedule and operate the system." The University of California observed that channel mapping creates disruption and switching interruptions in that the technology still requires significant adjustments for stereo and mono transmissions to be carried on the same channel and for smooth transitions when scrambled channels are switched from one signal input channel to another. The money spent on channel mapping, WCA suggested, "could be better spent" increasing educational activities and

⁸ More than 90% of the recently filed ITFS applications contained excess capacity lease agreements with wireless cable operators.

promoting new subscribers to the wireless cable systems. Moreover, Clarendon Foundation indicated that channel mapping adversely affects the relationship between ITFS licensees and their wireless cable partners: a more flexible leasing scheme, it observed, "will benefit our operations by streamlining the mechanism by which we interact with local wireless cable operators."

14. We believe that our endorsement of channel loading will provide ITFS licensees with a less costly, more reliable method for satisfying our educational requirements, as we define them below, while allowing them flexibility to cultivate their partnerships with wireless cable operators, an arrangement we have sought to nurture over the last decade, to the welfare of the ITFS service and the public. This ITFS-wireless cable symbiosis is unique to the ITFS service. Moreover, we acknowledge that wireless cable operators endeavoring to compete with wired cable systems, whose number of channels often exceeds 50, must have access to as many of the available 32 or 33 ITFS and MMDS channels as possible in a given market. In today's market environment, MMDS channels and ITFS channels are interrelated components of an integrated set of channels used to provide nonbroadcast instructional and entertainment programming in a given market. To maximize the usefulness of this network to both MMDS and ITFS licensees, the latter should account for four channels in this network. What we conclude for the first time today, therefore, is that even if it does not transmit ITFS programming on each channel, an ITFS licensee "needs" a group of four channels to have the opportunity to be a valuable partner in a market-wide wireless cable system. That wireless cable system, in turn, will strengthen significantly the ITFS service by providing, or continuing to provide, a source of funds to promote the educational purposes of ITFS, even if educational programming is not transmitted on all ITFS channels. Thus, rather than compel nascent ITFS operators to request fewer than four channels, which might reflect their actual educational programming needs but which also would lead to "excessive balkanization of the ITFS spectrum," Wireless Cable Order, 5 F.C.C. Rcd at 6416, we shall allow an applicant's Section 74.902(d) "demonstration of need" obligation to be presumptively discharged if its schedule complies with the rules of channel loading, discussed below.

15. Forming the nucleus of the interim channel-loading rules we adopt today are the five elements of the industry-wide compromise, which, we find, hew to our objectives discussed above. However, fine-tuning of some of those elements is required to bolster the most essential of our objectives, that of preserving the primary purpose of ITFS. At the outset, we note that that objective is of overriding concern regardless of whether a licensee utilizes channel mapping or channel loading. See Notice, 8 F.C.C. Rcd at 2831. Thus, although the compromise did not directly address the boundaries for channel-mapping licensees, we observe that to treat them similarly is justified because channel loading is functionally the same as the already-sanctioned channel mapping technology. One commenter disagreed. TVC/Stanford, while recognizing the legitimacy of channel mapping under our current leasing rules, attempt to distinguish on two grounds its use from that of channel loading, and, concomitantly, the validity of channel loading. Those attempts are not persuasive.

16. First, TVC/Stanford argue that mapping technology does not affect an ITFS licensee's use of four channels in accordance with the minimum use requirements. We acknowledge that mapping technology actually transmits ITFS programming over all of a licensee's authorized channels, thereby literally executing the mandates of Section 74.931(a), that the licensee "transmit" on each authorized channel formal educational programming, and of Section 74.931(e), that the licensee "provide" at least 20 hours per week of ITFS programming on each channel before leasing any of that channel's excess capacity. But the transmission of that programming over all authorized channels goes unnoticed by the student-viewers, the intended beneficiaries of the rules, who actually receive the programming on fewer than the number of authorized channels. Second, TVC/Stanford maintain that mapping technology does not adversely affect an ITFS operator's ability to schedule instructional programming to meet the needs of its students. Yet, we have observed that ITFS licensees engaged in channel mapping produce a "staggered" schedule of ITFS programming to facilitate the switching of blocks of programming from several channels to the ones dedicated to ITFS use.⁹ Both methods could affect an ITFS licensee's use of its channels at a particular time. But under the scheme we adopt here, ITFS licensees who utilize either channel mapping or channel loading must be able to, indeed, are required to, air programming tailored to their students and, as discussed below, must now be prepared to justify its channel utilization during certain hours of the day.¹⁰ We find that no plausible justification exists for permitting the use of channel mapping and denying the use of its functional equivalent, channel loading. To apply differing standards to each now, and we acknowledge that channel mapping technology was endorsed by the Commission without any specific guidance for its users,¹¹ would be unwarranted and would handicap those unable to afford costly channel-mapping technology.

⁹ For example, to accommodate a channel-mapping scheme which shifts all ITFS programming to one channel, say channel 4, an ITFS licensee might have to schedule its educational programs from 8:00 a.m. to 10:00 a.m. on channel 1, from 10:00 to noon on channel 2, from noon to 2:00 on channel 3, and from 2:00 to 4:00 p.m. on channel 4. In this way, although ITFS programming would be literally transmitted over all four channels, the shifting of the programming from channels 1 through 3 to 4 would free up for full-time commercial use three ITFS channels.

¹⁰ Additionally, the inherent advantage to educators of mapping technology, isolating educational materials from commercial programming so as to avoid student viewing of entertainment fare, is equally intrinsic to channel loading. See Notice, 8 F.C.C. Rcd at 2830.

¹¹ The Commission cautioned channel-mapping licensees that it would continue to review ITFS programming proposals "to assure that the nature and scheduling of ITFS programming is consistent with the primarily educational purpose of this spectrum," Wireless Cable Order Recon., 6 F.C.C. Rcd at 6774 n. 47. It also noted that "the appropriate educational use of licensed ITFS frequencies will also be reviewed upon renewal." Id.

17. As discussed in paragraph three above, the Notice in this proceeding indicated to educators and wireless cable operators that our concern was not "the mechanism by which ITFS channel time is made available to wireless cable operators, but how we can preserve the primary purpose of ITFS in light of our proposals here." 8 F.C.C. Rcd at 2831. With the exception of WJB-TV and TVC/Stanford, almost all commenters, both those opposed to and in favor of channel loading, equated channel mapping and channel loading. Our rules modification today support that conclusion. We believe that treating with differing standards two methods which are functional equivalents of each other would be irrational and contrary to the public interest and would favor those wireless cable operators able to afford costly channel mapping equipment by allowing them unfettered use of ITFS channels while restricting the use of those operators employing channel loading. Thus, the rules we adopt today for channel loading apply equally to channel mapping. However, we have provided that those licensees now operating under leases involving channel mapping will be grandfathered until the expiration of those leases. In the element-by-element analysis of the compromise below, we will refer, for shorthand purposes, to both mechanisms as "channel loading."

18. First and second components. We embrace the first element, which keeps in place the minimum of 40 hours per channel per week that a licensee must transmit from its ITFS system before leasing excess capacity. We also approve the portion of the compromise's second element which provides that 20 of those 40 hours per channel per week may be loaded onto fewer than the licensed channels. That the "loaded" programming must be transmitted over the licensee's own authorized channels, rather than over other channels in a market-wide MMDS/ITFS system, maintains the educational character of the ITFS channels. Indeed, licensees alone remain ultimately responsible for insuring that their physical facilities, their educational programming, and the commercial programming transmitted over their channels conforms with Commission rules and policies. See Second Report and Order, 101 F.C.C. 2d at 88-91.

19. What we reject in the second element, however, is the suggestion to transport to the channel-loading scheme the reduced minimum of 12 hours per channel per week, which reflects the Commission's separate, earlier accommodation of nascent ITFS systems. See Wireless Cable Order, 5 F.C.C. Rcd at 6416. Two years ago, the Commission relaxed the leasing rules so as to permit new entities to begin operations and lease excess capacity with a minimum of 12 hours of educational programming per channel per week for the first two years of operation. Id. Accordingly, a licensee, during its first two years, may transmit as few as two hours per channel, Monday through Saturday, an amount creating little, if any, impediment to the leasing of excess capacity on those channels. Under a channel-loading plan, wireless cable operators' access to as many as three entire channels for commercial programming should place them in a better economic position and enable them to fund and/or provide an average of at least 20 hours per channel per week of ITFS programming. Moreover, because the 12-hour-per-channel-per-week option seeks to "stimulate ITFS expansion and facilitate the initiation of new wireless cable systems," id., the identical purpose underlying our adoption of channel loading, we view channel loading as an alternative to, not an appendage of, the two-year, 12-hour minimum. Although a licensee may not use

the two plans in tandem, it may choose the reduced 12-hour alternative for the first two years and opt for channel loading on a 20-hour-per-channel-per-week basis thereafter.

20. Third component. We agree that it is most practicable to view a licensee's group of four ITFS channels as an integral constituent of a market-wide set of channels used to transmit instructional and entertainment programming. This set of channels comprises 16 other ITFS channels and as many as 13 MMDS channels. Thus, we affirm the third element of the compromise, that which permits recapture time to be transmitted over another ITFS or MMDS channel within a given market-wide system. It must be underscored, however, that the unbridgeability of licensee rights vis-a-vis this reserved 20 hours per channel per week, as described in the compromise, necessarily precludes a wireless operator from penalizing an ITFS licensee for invoking its right to transmit ITFS programming simultaneously on its number of authorized channels. Any clause in the lease agreement which exacts a penalty or constitutes a disincentive for exercise of this basic licensee right must be eliminated before we approve an application proposing channel loading. Moreover, because an ITFS licensee choosing to channel load restricts its own programming to fewer than four channels, recapture time may play a more vital role in fulfilling its educational mission than it now does. We determine, therefore, that channel-loading and channel-mapping licensees may invoke their recapture rights subject to six months' written notification to the wireless cable operator, rather than the one-year notice required under the prevailing rules, under which it must utilize all four channels.¹² This shortened notice period is an appropriate trade-off for wireless cable operators, who may transmit the recaptured ITFS programming on any channel in the market-wide system, not only on those authorized to the licensee. Under channel loading, ITFS licensees must undertake the obligation of insuring that their recapture-time programming, if it is to be transmitted over channels other than their own, actually reaches their students. It is also expected that the licensee will know in advance the channel or channels within the transmission system on which to receive its own shifted, recapture-time programming. The wireless cable operator in a channel-loading arrangement also assumes some obligations, primarily to insure that the entire recapture time invoked by the ITFS licensee, upon the requisite six months' notice, is transmitted during times of the day and days of the week requested.

21. Although this simultaneous recapture provision may, as WJB-TV contends, discourage some wireless cable operators from engaging in channel loading, it does not preclude them from continuing to operate under the current non-channel-loading leasing rules, whereby a licensee may negotiate its recapture time without a simultaneous use provision.¹³ A wireless operator desiring to

¹² The one-year written notification requirement, see Wireless Cable Recon., 6 F.C.C. Rcd at 6774, will remain as the standard lease provision for those licensees neither channel loading nor channel mapping.

¹³ In Wireless Cable Order Recon., 6 F.C.C. Rcd at 6774, we left licensees and wireless cable operators free to negotiate the schedules for transmission of required programming quantities. Prior to that modification,

utilize channel loading and reap its benefits must abide by its attendant conditions, but may negotiate with the ITFS licensee based upon its perceived value of the channel loading arrangement as we define it today. That is, a wireless cable operator and an ITFS licensee are free to enter a lease agreement involving channel loading, ascribing to that arrangement whatever dollar value they believe fair. However, because they were negotiated in good faith under our former rules, all lease agreements providing for channel mapping which were executed and filed with the Commission prior to the release date of this Order will be grandfathered so as to permit continued use of channel mapping. The renewal of such leases, however, must comply with the standards set forth above. We disagree with WJB-TV's suggestion that we grandfather current lease provisions relating to ready recapture, presumably so that wireless operators may switch to channel loading under their existing agreements. This would contractually preclude ITFS licensees from invoking recapture time on all of their authorized channels on a simultaneous basis, an undesirable result. The basis of the bargaining should not have included channel loading, a practice we now allow for the first time. Thus, once our rules become effective, all lease agreements, and renewals thereof, involving channel-loading and channel-mapping and executed on the date of adoption or after must adhere to the rules we adopt today.¹⁴

22. Fourth component. The fourth factor contains three segments. The first two provide that applicants will be deemed to have discharged the "demonstration of need" obligation of Section 74.902(d) and satisfied renewal requirements, so long as they channel load within the parameters of the compromise. We believe, as discussed above, that Section 74.902(d)'s "need" requirement should be modified to more accurately reflect the reality that educators do, in fact, "need" the full complement of the four channels in a given channel group in order to attract and retain as "partners" the wireless cable operator, without whom the ITFS system might never be constructed and operated. In 1985, when the now-existing "demonstration of need" provision of Section 74.902 was adopted, the Commission decided to consider each application and its accompanying demonstration of need on an ad hoc basis, taking into consideration such factors as "the amount of use of any currently assigned channels and the amount of proposed use of each channel requested, the amount of, and justification for, any repetition in the schedules, and the overall demand and availability of ITFS channels in the community." Second Report and Order, 101 F.C.C. 2d at 77; see also 47 C.F.R. §74.902(d). Documentation as to those factors, the Commission stated, were to be the proposed weekly schedule for each channel requested and a "narrative showing of need for each channel to meet traditional programming proposals." Id.

the recapture time had to be scheduled between 8:00 a.m. and 10:00 p.m., Monday through Saturday, with three hours per channel per day of such programming carried Monday through Friday.

¹⁴ Agreements entered into between the adoption date and the effective date must, upon the effective date of the rules, be modified to conform with the new rules.

23. Over the past nine years, the Commission, in practice, has come to rely primarily on the proposed schedules, the more concrete representation as to anticipated ITFS usage, and secondarily on the narratives, which largely replicate information that can be gleaned from the schedules and receive site lists. As a result, the threshold for need has come to be equated with that detailed in Section 74.931(e), that is, the minimum amount of ITFS programming required of licensees before they may lease excess capacity. The introduction of channel loading should not be cause for upsetting this equilibrium. Section 74.902(d)'s "demonstration of need" provision, therefore, will be amended so that an applicant complying with Section 74.931(e), that is, transmitting an average of 20 hours of ITFS programming per channel per week, will have presumptively demonstrated "need," rebuttable by demonstrating that the ITFS application does not comply with the programming requirements set forth in paragraph 26, below. A narrative showing of need, therefore, will no longer be required of any applicant. Accordingly, we shall delegate authority to the Chief, Mass Media Bureau, to amend FCC Form 330 to delete Question 3 of Section IV.

24. It is true, as TVC/Stanford observe, that the Commission rejected channel loading a little more than three years ago in Wireless Cable Order, 5 F.C.C. Rcd at 6416. But we did so not because it would result in a de facto reallocation or would violate the Act, but because it would breach our then-held view that applicants should request only the number of channels that they can utilize. In light of the discussion above, that "need" for channels parallels the programming obligations of Section 74.931(e), we have changed our views on this matter. We find that a channel-loading scheme, replete with the requirements included in this Order, adheres to the letter and spirit of Section 307(b) of the Act, which provides that the Commission must distribute licenses, frequencies, and hours of operation so as to provide a "fair, efficient, and equitable" distribution of service. Further, the proposal we did repudiate in Wireless Cable Order as constituting a de facto reallocation and a violation of Section 307(b) of the Act was not channel loading, but one to eliminate all ITFS programming requirements so that ITFS licensees could lease their entire capacity if they determined that the revenues derived from leasing would be more valuable than its own use of the spectrum. That is, we found that it would be improper to authorize to an educator a portion of the ITFS spectrum which would be devoid of at least a threshold amount of ITFS programming. We maintain that belief and emphasize that such a proposal is impermissible under the current ITFS allocation.

25. We neither believe nor intend that our action here constitutes a reallocation of the spectrum. To the extent that our decision to allow ITFS licensees greater flexibility could be viewed as, in effect, allocating part of the ITFS spectrum for wireless cable use, insofar as educators elect to enter into excess capacity leases, we conclude, based on the record before us, that such action serves the public interest. In this regard, our action both bolsters the ITFS service by giving ITFS licensees additional options, while ensuring that the fundamental purpose of ITFS is achieved. At the same time, our action today will promote wireless cable operators as a viable competitor to the cable television industry by providing the potential for greater channel availability. Yet, while we believe this flexibility for ITFS

licensees will benefit both the ITFS and MMDS services, we remind ITFS licensees that channel loading is permissive only, and not mandatory. Thus, those educators desiring to transmit instructional programming simultaneously on each of their authorized channels may continue to do so, negotiating leases that are consistent with their educational objectives and Commission rules. Indeed, ITFS licensees may decline altogether to lease their excess airtime. Thus, our rule amendments here, adopted within this notice and comment rule making proceeding, are fully consistent with Section 307(b) and serve the public interest.

26. We remind all applicants that while channel loading alters the essential use standard so as to permit all requisite ITFS programming to be shifted to fewer than all four channels in a four-channel system, formal education remains the cornerstone of the ITFS service. Second Report and Order, 101 F.C.C. 2d at 81. To this end, we now clarify how channel-loading applications will be processed. First, we shall continue to mandate that each ITFS system carry some formal educational programming, that is, programming offered to students enrolled at accredited schools for credit toward an academic degree or diploma. Additionally, as is now the practice, each applicant must submit with its application a proposed schedule, with a brief description of programs not recognizable by their titles. See FCC Form 330, Section IV, Item 5. Because channel loading shifts the crux of this service to as few as one or two channels, the type of programming and time of transmission becomes ever more vital to ensuring that licensees meet basic minimum programming requirements and that that programming is transmitted to receive sites when students are there. Thus, program schedules and grids must reflect, as nearly as possible, the programming the applicants intend to transmit during their first year of operations. This is a departure from our current processing standard, in which the schedule has been reviewed by staff as one for illustrative purposes only. We caution all ITFS applicants employing channel loading that their schedules cannot be generic. Rather, these programming schedules must be tailored to the specific, anticipated needs of the applicants and their receive sites for the first year of operation. As with all plans, we realize that these needs may change. But such changes must be reflected in amendments to pending applications, with accompanying narrative justification for those changes, and will be entitled to no comparative upgrade unless filed on or before the B cut-off date. Not only will this compel applicants to carefully plan which ITFS programs to transmit to which audience at which time of the day and week, it will also produce a schedule more readily capable of Commission examination. An applicant channel loading all ITFS programming onto one channel translates into 80 hours, or four channels multiplied by the 20 requisite hours per channel, of programming on a single channel per week, an amount which would, for most applicants, necessarily entail scheduling programming outside normal school-day hours. Thus, in order to comply with the fundamental purpose of ITFS, applicants may be able to free up for commercial use less than three full channels.¹⁵ We shall continue to review schedules to assure that the

¹⁵ It may be that a licensee can properly serve its designated receive sites on one channel plus a fraction of another. Any configuration of programming is permissible so long as it is justifiably for educational

nature of the programming is consistent with the primarily educational purpose of this spectrum, see Wireless Cable Order Recon., 6 F.C.C. Rcd at 6774 n. 47, and we reserve the right to seek justification as to the time-of-day and day-of-week slots assigned to ITFS programming that are obviously well outside traditional school hours. Applicants must be ready and able to document genuinely educational purposes for their schedules at any time. The videotaping of ITFS programming which is transmitted in the early hours of the day for later replay during the school day appears, as we noted in Wireless Cable Order, 5 F.C.C. Rcd at 6416, "unredeemably wasteful of the spectrum" and libraries for such taped presentation can be readily assembled without the use of ITFS facilities. Compliance with the above will also be reviewed upon renewal. We shall delegate to the Chief, Mass Media Bureau, the authority to amend FCC Form 330-R to require renewal applicants engaged in channel loading at least one year prior to the expiration date of their licenses to submit a copy of their program schedules for the last year of operations. A written justification, based upon educational principles, should accompany such schedules containing any programming that was transmitted obviously outside traditional school hours. We find that this approach to enforcing the minimum amount of programming required of ITFS licensees proposing to channel load will preserve for educational programming its preeminent role in the ITFS service.

27. As for the third segment of this component of the compromise, we agree that no demerit is to be assessed against channel-loading applicants in the comparative selection procedure. However, we shall continue to abide by the directive of Section 74.913, Note 2 of our rules, which considers for programming merit point purposes only that ITFS programming scheduled between the hours of 8:00 a.m. and 10:00 p.m., Monday through Saturday.

28. Fifth component. The fifth element provides that the Commission's adoption of channel loading will not serve as the basis for future efforts to seek reallocation of "non-loaded" ITFS spectrum for commercial use. While the parties to the compromise have assented to refrain from seeking reallocation, such voluntary forbearance will not dissuade the Commission, upon an appropriate public interest showing, from examining in the future the efficient use of the ITFS spectrum. However, as emphasized above, no reallocation of ITFS spectrum, of either loaded or non-loaded channels, will emerge from the interim channel-loading rules we adopt today.

29. Sunset provision. Finally, after weighing the concerns of small wireless cable operators, which believe they will be unable to implement digital compression technology immediately upon its availability, and those of educators, which believe a shorter sunset period would advance the primary purpose of ITFS, we conclude that the channel loading rules adopted here will remain in effect until we assess the impact of digital compression on both the

purposes. For example, a licensee which is a college or university may determine that it will transmit programming from 7:00 a.m. to 6:00 p.m., Monday through Friday, and from 8:00 a.m. to 1:00 p.m. on Saturday, on one channel, and from 8:00 a.m. to noon, Monday through Friday, on a second channel, for a total of 80 hours per week.

MMDS and ITFS services, through a future notice and comment rule making proceeding. Lease agreements permitting channel loading and mapping must acknowledge that those practices are subject to any future Commission rule changes. In conclusion, we believe that these provisions will promote the continued vitality of the ITFS service, with its important public interest benefits, as well as assist the development of MMDS as a competitive alternative to cable.

ADMINISTRATIVE MATTERS

30. Final Regulatory Flexibility Analysis. Pursuant to the Regulatory Flexibility Act of 1980, the Commission finds:

Reason for the action: The purpose of this action is to allow for the further use of a licensee's excess airtime capacity by wireless cable operators.

Summary of issues raised by the public comments in response to the initial Regulatory Flexibility Analysis: There were no comments submitted in response to the Initial Regulatory Flexibility Analysis.

Significant alternatives considered and rejected: The Commission considered altering the simultaneous recapture right so that a licensee and wireless cable operator could negotiate the number of channels, times of the day, and days of the week for transmitting the recapture time. This unbridgeable right contained in the industry-wide compromise was deemed to be essential to educators agreeing to the compromise. We conclude that the simultaneous recapture right is a restriction on the use of channel loading necessary to maintain the primary purpose of the ITFS service.

The Commission also considered retaining the one-year's notice required of licensees invoking their ready recapture time under the current leasing rules. The Commission finds that a shorter, six-months' notice is needed by channel-loading licensees, whose one or two channels may not fulfill its educational needs as readily as do four under the prevailing rules.

31. The Secretary shall send a copy of this Report and Order, including the Final Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration in accordance with paragraph 603(a) of the Regulatory Flexibility Act (Pub. L. No. 96-354, 94 Stat. 1164, 4 U.S.C. §601, et seq. (1981)).

32. For additional information on this proceeding, contact Anne Lucey, Mass Media Bureau, (202) 418-1630.

ORDERING CLAUSES

33. IT IS THEREFORE ORDERED that pursuant to the authority contained in Section 4(i) and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§154(i), 303(r), Part 74 of the Commission's Rules, 47 C.F.R. §74, IS AMENDED as set forth in Appendix B below.

34. IT IS FURTHER ORDERED that the amendments to 47 C.F.R. Part 74 adopted in this Report and Order will be effective 30 days after publication in the Federal Register.

35. IT IS FURTHER ORDERED that the Chief, Mass Media Bureau, is delegated authority to amend FCC Forms 330 and 330-R, subject to the approval of the Office of Management and Budget.

36. IT IS FURTHER ORDERED that Mass Media Bureau Docket No. 93-106 IS TERMINATED.

FEDERAL COMMUNICATIONS COMMISSION



William F. Caton
Acting Secretary

APPENDIX A

Comments to the Notice:

1. American Council on Education, American Association of Community Colleges, Alliance for Higher Education, Arizona Board of Regents for Benefit of the University of Arizona, Board of Regents of the University of Wisconsin System, Iowa Public Broadcasting Board, Regents of the University of New Mexico and Board of Education of the City of Albuquerque, South Carolina Educational Television Commission, State of Wisconsin - Educational Communications Board, and University of Maine System (ITFS Parties)
2. Besozzi, Gavin & Craven
3. Board of Cooperative Educational Services of Nassau County (Nassau County)
4. The Board of Education of the Township of Union, New Jersey
5. Butler County Community College
6. Catholic Television Network
7. Clarendon Foundation
8. Coalition of Concerned Wireless Cable Operators
9. Cross Country Wireless Cable I, L.P., California State Polytechnic University at Pomona, San Bernardino Community College District, the Diocese of San Bernardino Education and Welfare Corporation, and the Regents of the University of California (Cross Country/Box Springs)
10. Diocese of Oakland
11. Kern Educational Telecommunications Consortium
12. Metropolitan Community College
13. Missouri Southern State College
14. National ITFS Association (NIA)
15. New Orleans Educational Telecommunications Consortium
16. North American Catholic Educational Programming Foundation, Inc. (NACEPF)
17. Parkland College
18. The Regents of the University of California (University of California)
19. Rural Wireless Cable Group (Rural Wireless Group)

20. Trans Video Communications, Inc. and the Trustees of Leland Stanford Junior University (TVC/Stanford)
21. Transworld Telecommunications, Inc. (Transworld)
22. United States Distance Learning Association
23. University of Colorado at Boulder
24. University of Maryland
25. University of Louisville
26. Wireless Cable Association International, Inc. (WCA)
27. WJB-TV Limited Partnership (WJB-TV)

Reply comments:

1. American Council on Education, et al.*
2. Besozzi, Gavin & Craven
3. Coalition of Concerned Wireless Cable Operators
4. Kern Educational Telecommunications Consortium
5. Hispanic Information and Telecommunications Network, Inc. (HITN)
6. The Learning Society of Elkhart Inc.
7. National ITFS Association*
8. Spokane Falls Community College, Spokane Community College, and Gonzaga University Telecommunications Association*
9. Trans Video Communications, Inc. and The Trustees of Leland Stanford Junior University
10. Wireless Cable Association International, Inc.*
11. WJB-TV Limited Partnership

* These reply comments included a discussion of the compromise agreement.

Comments to compromise:**

1. Butler County Community College
2. California Amplifier, Inc.
3. Coleman (Texas) Independent School District
4. Dade County (Florida) Public Schools
5. Decathlon Communications, Inc.
6. Goldthwaite (Texas) Independent School District
7. INTELECOM Intelligent Communications
8. Lohn (Texas) Independent School District
9. Missouri Southern State College
10. Mullin (Texas) Independent School District
11. North American Catholic Educational Programming Foundation Inc.
12. PACE Telecommunication Consortium
13. Panther Creek (Texas) Consolidated Independent School District
14. Priddy (Texas) Independent School District
15. Rochelle (Texas) Public Schools
16. Santa Anna (Texas) Independent School District
17. Star (Texas) Public Schools
18. Township of Union (New Jersey) Public Schools
19. Trans Video Communications, Inc.
20. University of Arizona
21. WJB-TV Limited Partnership

** Oklahoma City University and the University and Community College System of Nevada separately submitted late-filed comments to the compromise. Nevertheless those comments have been incorporated and considered in this proceeding.

APPENDIX B

Part 74 of Chapter 1 of Title 47 of the Code of Federal Regulations is amended as follows:

1. The authority citation for Part 74 continues to read as follows:

AUTHORITY: 47 CFR Secs. 4, 303 48 Stat. 1066, as amended, 1082, as amended, 47 U.S.C. 154, 303, unless otherwise noted. Interpret or apply Secs. 301, 303, 307, 48 Stat. 1081, 1082, as amended, 1083, as amended; 47 U.S.C. 301, 303, 307.

2. Section 74.902 is amended by moving all of the current (d) to (d)(1) and adding (d)(2) as follows:

§74.902 Frequency assignments.

(d)(2) An applicant leasing excess capacity and proposing a schedule which complies in all respects with the requirements of Section 74.931(e) will have presumptively demonstrated need, in accordance with paragraph (d)(1) of this section, for no more than four channels, all part of the same Group listed in paragraph (a) of this section. This presumption is rebuttable by demonstrating that the application does not propose to comport with our educational programming requirements, that is, to transmit some formal educational programming, as defined in Section 74.931(a), and to transmit the requisite minimum programming of Section 74.931(e) for genuinely educational purposes and to receive sites when students are there.

3. Section 74.931 is amended by revising paragraphs (a)(1) and (e)(9) as follows:

§74.931 Purpose and permissible service.

(a)(1) Instructional television fixed stations are intended primarily to provide a formal educational and cultural development in aural and visual form, to students enrolled in accredited public and private schools, colleges and universities. Authorized instructional television fixed station channels must be used to transmit formal educational programming offered for credit to enrolled students of accredited schools, with limited exceptions as set forth in paragraph (e)(9) of this section and Secs. 74.990 through 74.992 of this part.

(e)(9) A licensee may shift its requisite ITFS programming onto fewer than its authorized number of channels, via channel mapping technology or channel loading, so that it can lease full-time channel capacity to a wireless cable operator, subject to the condition that it provide a total average of at

least 20 hours per channel per week of ITFS programming on its authorized channels. The licensee also retains the unbridgeable right to recapture, subject to six months' written notification to the wireless cable operator, an average of an additional 20 hours per channel per week for simultaneous programming on the number of channels for which it is authorized. The licensee may agree to the transmission of this recapture time on channels not authorized to it, but which are included in the wireless system of which it is a part.

**SEPARATE STATEMENT
OF
COMMISSIONER JAMES H. QUELLO**

**RE: ITFS Channel Loading
(MM Docket No. 93-106)**

Over the course of the last ten years it has been necessary for the Commission to deal in an evolutionary manner with the evolving ways that the ITFS and MMDS services alternately complement, and conflict, with one another. They complement each other, as today's Report and Order correctly notes, because each forms a segment of an interwoven set of channels used to provide both instructional and educational programming in a given area. Yet at the same time they conflict with one another because the slow growth of channel utilization by many ITFS licensees matches up poorly with the profit-motivated, demand-driven growth of MMDS systems. The Commission's objective today remains the same as it has always been - to tailor its rules to assure that the instructional uses of ITFS are ultimately preserved, and even enhanced, by compatible use of ITFS channels by MMDS licensees.

The Report and Order we adopt today carries forward the Commission's "win/win" strategy for ITFS and MMDS licensees. Channel loading will achieve the same result as channel mapping without its inefficiencies. ITFS licensees wishing to opt for channel loading should find their instructional programming presented in a cohesive channel format that should prove user-friendly to the student audience, and the channel reclamation rules implemented today should assure ITFS licensees of their ultimate right to broadcast as much instructional programming as their channel allocation would otherwise accommodate. We also carry forward existing policies that allow lessor ITFS licensees to enjoy the benefits of leased channel revenues contributed by lessee MMDS licensees. MMDS licensees are in turn assured of a stable complement of leased ITFS channels and they will have fair notice of, and ability to adapt to, increased future channel usage, by ITFS channel lessors.

Perhaps the most encouraging aspect of today's Report and Order, however, is that it underlines the fact that the coming information superhighway will actually be composed of many different "lanes" of telecommunications services. To the extent that we have today helped to assure that both ITFS and MMDS will be component parts of that highway, we have acted in the best interests of the public as well as of the licensees most immediately involved. And that, in my book, makes this Report and Order worthy of the endorsement the Commission gives it.